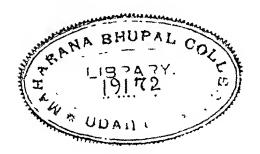
PLEASURE AND PURPOSE

An Anthology of Fact and Fiction



LONGMANS, GREEN AND CO LONDON · NEW YORK · TORONTO LONGMANS, GREEN AND CO LTD 6 & 7 CLIFFORD STREET LONDON W I BOSTON HOUSE STRAND STREET CAPE TOWN 531 LITTLE COLLINS STREET MELBOURNE

LONGMANS, GREEN AND CO INC 55 FIFTH AVENUE NEW YORK 3

LONGMANS, GREEN AND CO 20 CRANFIELD ROAD TORONTO 16

ORIENT LONGMANS LTD CALCUTTA BOMBAY MADRAS DELHI VIJAYAWADA DACCA

> First published 1955 Second impression 1955

Made and printed in Great Britain by William Clowes and Sons, Limited, London and Beecles

FOREWORD

Or the hundreds of prose anthologics one would have thought it possible to find one that would be suitable for our Sccondary School pupils learning English as a foreign language. It has proved so difficult, however, that it was decided to produce a selection more specially adapted to our needs.

An anthology of living English is, of course, different from prose specially written as a language text-book. An author when writing is not normally thinking of pupils reading his work in order to pass an examination; and an extract which is otherwise suitable may contain a few unusual words, or refer to something outside the knowledge of the foreign student. Nevertheless it is hoped that the pieces chosen will be understood and enjoyed.

The following questions have been asked of each extract before it was included by the Committee responsible

for the compilation and preparation of this book:

1. Is the vocabulary, with the exception of a modicum of technical words, largely within the 5,000-words range listed by the Interim Committee on Vocabulary Selection?

- 2. Is the extract self-contained?
- 3. Is it of interest to most of the pupils?
- 4. Does it furnish a model on which the pupils can write a composition?

Only where the Committee were of the opinion that on the whole each of these questions could be answered by "yes" did they include any particular piece.

iii

iv Foreword

Hundreds and hundreds of extracts had to be read, and re-read, before the Committee were satisfied that the selection they had made would be suitable. The Department is grateful to Mr. C. L. Germanacos for his work as Chairman of the Committee and to Mr. J. Earle, Mr. T. Fitikides, Mr. H. Nidai, Mr. O. Sheohmelian and Mr. A. Smale for their invaluable assistance as members. They have chosen the extracts and, having chosen, they have graded them in order of difficulty. Thanks are also due to Messrs. Earle and Smale for the arduous hours of work they put into the notes.

I hope that this selection of prose, with its varied contents, material, language and literary forms, will not only be a pleasure in itself but will encourage you to go further afield and read more widely, not only from the authors represented here but from others equally interesting.

G. F. Sleight, Director of Education, Cyprus

CONTENTS

				Pag
For	REWORD			7
I.	Reading for Pleasure L. A. G. Strong			3
2.	The Happy Prince Oscar Wilde .			10
3.	The Selfish Giant Oscar Wilde .			21
4.	Shakespeare G. Holroyd			27
5.	Charles Dickens G. Holroyd			32
6.	Tact B. N. Saxelby			35
7.	The Sad Story of a Lost Memory F. R.	Barre	att	37
8.	Fighting Through Ralph Wotherspoon			40
	The Miracle of Radio Horace Shipp			44
10.	The Sign of the Red Cross Horace Shipp	5		51
ı.	A Strange Story O. Henry			57
12.	Ferdinand de Lesseps J. Walton .			59
13.	The Conjurer's Revenge Stephen Leacock	: -		69
14.	Deer Shooting Halliday Sutherland.			71
15.	A Visit to the Moon James Jeans.	•		73
16.	The Monster Wasps H. G. Wells.	•		77
17.	The Purple Jar Maria Edgeworth .			82
18.	The Refugee Pearl S. Buck			89
19.	Flying G. C. Thornley			95
20.	Mass Production G. C. Thornley .	•		104
21.	Medicine G. C. Thornley			113
22.	Andrew Carnegie E. H. Carter .			128
23.	Marie Curie E. H. Carter			137
24.	The Bishop's Candlesticks Norman McK	innel		146
25.	The Glove R. U. Joyce			164

vi Contents

	Page
26. Post Haste Colin Howard	169
27. The Launching of the "Queen Mary" J. B.	
Priestley	173
28. The Death Trap H. H. Munro	178
29. If I were You Douglas James	185
30. On Reading in Relation to Literature Lafcadio	
Hearn	191
31. The Monkey's Paw W. W. Jacobs	199
32. The Stolen Bacillus H. G. Wells	213
33. The Use of Scientific Knowledge L. P. Jacks	220
Notes	226

ACKNOWLEDGEMENTS

We are indebted to the following for permission to reproduce copyright material:

Messrs. E. J. Arnold & Son Ltd. for Carnegie and Marie Curie from E. H. Carter's "Pioneers of the Modern World"; Messrs. Geoffrey Bles Ltd. for an extract from The Arches of the Years by H. Sutherland; Miss Pearl Buck and Messrs. Methuen & Co. Ltd. for The Refugee from "The First Wife"; Cambridge University Press for an extract from Through Space and Time by Sir James Jeans; Messrs. Wm. Collins Sons & Co. Ltd. for Shakespeare and Dickens from "Fifty Famous Lives" by G. Holroyd; Messrs. Dodd Mead & Co. for material from Lascadio Hearn's "Life and Literature"; Messrs. Doubleday & Company Inc. for A Strange Story from "Rolling Stones" by O. Henry; Mr. C. E. Eckersley for The Glove by R. U. Joyce; Messrs. Evans Bros. Ltd. for The Miracle of Radio and The Sign of the Red Cross from "Ideas that Moved the World" by Horace Shipp; Messrs. Samuel French Ltd. for The Bishop's Candlesticks by Norman McKinnel; Mr. Colin Howard for his article Post Haste; Mr. L. P. Jacks for an extract from a broadcast made in 1938 entitled The Use of Scientific Knowledge; Messrs. John Lane The Bodley Head Ltd. for The Death Trap from "The Complete Novels and Plays of Saki", and for an extract from Stephen Leacock's Literary Lapses: Messrs. Longmans, Green & Co. Ltd. for extracts from Power and Progress by G. C. Thornley; The Oxford University Press for an extract from Seven Civil Engineers by J. Walton; Mr. J. B. Priestley for The Launching of the Queen Mary; The Proprietors of Punch for Tact by B. N. Saxelby, The Sad Story of a Lost Memory by F. R. Barratt, and Fighting vii

Through by R. Wotherspoon; The Society of Authors as the Literary Representatives of the Estate of the late W. W. Jacobs for The Monkey's Paw; Mr. L. A. G. Strong and Messrs. Methuen & Co. Ltd. for material from English for Pleasure; and The Executors of the late H. G. Wells for an extract from The Food of the Gods, and for The Stolen Bacillus from "Collected Short Stories of H. G. Wells". We have been unable to trace the copyright owners of If I Were You by D. James, and we should welcome any information in regard to this matter so that we can obtain and acknowledge formal permission in the next printing.

a 1 r

READING FOR PLEASURE

To my mind, the only sensible reason for reading anything is because we enjoy it or hope to enjoy it. Of course, pleasure covers a whole variety of feelings and shades of feeling. But it is my strongest belief about reading that one should read only what one likes, and because one likes it. I am talking, of course, of our private reading. When we are studying special subjects, or working for examinations, we obviously have to read a good deal that we would not choose to read in other circumstances.

It may seem odd to have to insist that one should only read because one liked it: but people read for such a queer variety of reasons. There are people who read a book, not because they enjoy the book, but because they want to be able to say that they have read it. They want to be in the swim. Ten to one, when they read a book for those reasons, they only skim through it, because all they really want to do is to be able to talk as if they had read it. There are people who set themselves down to read a book because they think it will do them good. They make a duty of it, a kind of penance. Sometimes they go so far as to set themselves so many pages at a time. If it is some kind of technical book, which they are reading in order to improve their knowledge, well and good. But if it is a novel, or a poem, or any part of what we call "English Literature," then the person who is reading it in this way is wasting his or her time.

You cannot take a good book as if it were medicine. It is rude to the book, and very silly from our own point

of view. By approaching it in that way, you make sure of losing anything it might have to give you. You only begin to get good from a book when your spirit and the book's spirit come together. A book is like a living person. You must meet it as a friend, and actively like it, if any good is to pass between you.

A reason why people at school read books is to please their teacher. The teacher has said that this, that, or the other is a good book, and that it is a sign of good taste to enjoy it. So a number of boys and girls, anxious to please their teacher, get the book and read it. Two or three of them may genuinely like it, for its own sake, and be grateful to the teacher for putting it in their way. But many will not honestly like it, or will persuade themselves that they like it. And that does a great deal of harm. The people who cannot like the book run the risk of two things happening to them: either they are put off the idea of the book—let us suppose the book was David Copperfield—either they are put off the idea of classical novels, or they take a dislike to Dickens, and decide firmly never to waste their time on anything of the sort again: or they get a guilty conscience about the whole thing, they feel that they do not like what they ought to like and that therefore there is something wrong with them.

They are quite mistaken, of course. There is nothing wrong with them. The mistake has all been on the teacher's side. What has happened is that they have been shoved up against a book before they were ready for it. It is like giving a young child food only suitable for an adult. Result, indigestion, violent stomach-ache, and a rooted dislike of that article of food for evermore.

Still, I am not sure that even that is not better than the fate of the people who manage to persuade themselves that they enjoy the book. What happens to them is truly terrible. Once they get into the way of this kind of thing,

they cease to have any taste of their own at all. They do not know what they think. Their real feelings, their real tastes are all stoppered down under this sense of duty, which tells them that whatever Mr. Thingumbob or Miss Whatshername recommends to them is good, and that therefore, of course, they like it.

That has happened to a very great number of men and women of my acquaintance. They do not know what is good; they know only what is supposed to be good. They do not know what they like; they know only what they ought to like. If you show them a book or a picture, if you play them a piece of music or put a record on the gramophone, you see them desperately trying to recognize it if it is music, and looking quickly to see the author's name if it is a book. Because, until they have seen the label, they do not know whether they ought to like it or not. Give them something without a label, and they are lost. They have long been without any power they ever had to judge a thing on its merits.

Now for a question on which people quarrel violently. Does it do any good to advise people to read certain books? What is the effect produced when a teacher or anybody else says, "You ought to read Vanity Fair, or The Old Curiosity Shop," or whatever the name of the book may be? Does it make the average person want to read the book, or does it put him or her right off?

The answer will depend, in the first place, upon the person who gives the advice, and, in the second place, upon the person to whom the advice is given. It is not a subject upon which one can lay down the law, one way or another; and I cannot pretend to do more than give my own beliefs.

I do, however, remember very clearly my own experiences and my own reading, from a very early age. You may, or may not, be like me—but I confess that, in the

matter of reading, at any rate, I have always been a bit contrary. I have always preferred to go my own way.

When I was a very small boy, my ankles were weak, and I was slow in learning to walk. As a result, I learned to read sooner than most children. My grandmother used to read a great deal to me—school stories, all very virtuous, where the hero and his favourite teacher were incredibly brave, and the bad lad was terribly bad, and came to an edifying end in the last chapter but one. From these stories we came to Eric, or Little by Little, and St. Winifred's, which were similar in moral tone, but much better written.

As I grew older, and chose my own reading, I rushed to comic papers and penny bloods. The youth of today can have no idea what a wonderful period that was for penny bloods.... It was the golden age of thrillers, and I read them all. I have got some still in my bookcase. Only a few; but I treasure them.

Some good people, when they saw me reading these in the train on my way to school, would shake their heads, and say they wondered my parents allowed it. But my father, a man of great sympathy and good sense, took a wise and tolerant view. He argued that, if I had any sense, I would grow out of this type of reading: if I had not, it did not matter what I read, as I should be a fool anyway.

Besides, he argued, if he forbade me to read these things I should want to read them all the more, because they would have the charm of being illegal. He was proved right on that point. Once my mother and grandmother, horrified by a particularly lurid picture on the cover of one of my Claude Duval books, told me to tear it up. I could not bear to do this, so I hid it under a loose board in my grandmother's summer-house, where it stayed for two or three years, and received many secret and guilty.

readings it would never have had otherwise: for my father was right on the other point too. I had grown out of my taste for highwaymen, and gone on to other books. But this forbidden book lasted longer than all the rest, because it was forbidden.

I have never regretted my penny-dreadful period. Indeed, I owed my Jack Sheppard library the discovery of one good writer at least. That was Harrison Ainsworth, whose novel about Jack Sheppard I found in my boarding-school library during my first few days there, and jumped to it with a homesick thrill. I liked it, and proceeded to read all the other Harrison Ainsworths I could find.

Besides penny bloods. I read other stories of adventure: and, as I grew a little older, I began to realize that they were better written than the penny bloods. They were not less exciting: they were more exciting. Under the Red Robe, by Stanley Weyman, which was read to us at school, was better value than Claude Duval. Sherlock Holmes was better value than Sexton Blake: more exciting, more satisfying. I could believe in him better: the people he met were more like real people. Then my favourite magazine, The Captain, began to print school stories by a new writer called P. G. Wodehouse: and they were better than the adventures of Tom Merry, of Harry Wharton and Co. They were funnier, and they were more like real school. Then, when I was getting better from measles, my father read me some of W. W. Jacobs's stories. I laughed till I nearly fell out of bed, and from that day always read everything by Jacobs that I could find.

One day, at school, an older boy said to me, "If you like Jacobs, you'd like Dickens." I was very suspicious, but I tried one at last: and then I read ten of Dickens all in a row.

At my first school, we read Shakespeare plays with a teacher who made them very interesting indeed. The first time I came to London on a visit with my father, in 1907, I gave him no peace till he took me to see Sir Herbert Tree in The Merchant of Venice, the play we were reading at the time. Later, when the Benson Company came to Plymouth, I went every night for a whole week, reading the play by day, and seeing it in the evening. After that, I got hold of all the plays I could lay my hands on by the other playwrights of Shakespeare's time. (I confess that one of the reasons I liked them was that they sometimes dealt with things I was not supposed to know about: but that was not the only reason.) I read all sorts and conditions of things, as I do today, for one reason, and one reason only: because I liked them.

There were poems that I liked, too: and when I say liked, I mean liked. That same English teacher I mentioned just now used to read poetry to us, and encourage us to read it for ourselves. She was very tactful about it. She did not ram things down our throats, or insist that we must like what she liked. She encouraged us to discuss the poems, and say if we liked them or disliked them.

I was young enough not not to have any prejudice against poetry. Very few people have, if no one puts them off it either by forcing it on them, or making them learn it by heart before they want to, or if they do not hear older boys and girls laughing and suggesting that it is sissy or highbrow to enjoy poetry. I do not see why anyone should read poetry who does not like it. Thank heaven, we are none of us under any obligation to read anything. But a good many people will not give poetry a fair try, or let themselves enjoy it. I took it as it came, when I was a boy, and I have had pleasure and good from it ever since. . . .

The books and plays and poems to which I was introduced by this schoolmistress I liked in exactly the same way as I used to like the penny bloods: that is to say, I

enjoyed reading them, or hearing them read, because they interested me. I read them for pleasure. At that school, owing to the sense and understanding of this school-mistress, there was no nonsense about its being priggish or sissy to like good books. We only knew a book was good because we liked it. We did not know, for instance, that David Gopperfield was an English classic. We only knew that one day the schoolmistress brought a copy into class, and made us start reading aloud about David going to church on Sunday morning, and about his visit to the upturned boat at Yarmouth, in which the Peggottys lived. These things delighted us and made us laugh, and so we thought that David Copperfield was a good book, and enjoyed it, in just the same way as we were enjoying P. G. Wodehouse's school stories in The Captain.

And that, beyond all possible doubt, is the way to go at your reading: to enjoy it, and to read because you enjoy it, and not to read anything that bores you, because that makes it even less likely that you will enjoy it later on. It is, first of all, a question of age, of the stage in one's growing up which one has reached. (I mean mental rather than physical age.) My friends and I used to read the Dick Turpins and Jack Sheppards because we were in a stage when violent and bloodthirsty adventures were all we wanted. Later on, when we had grown out of that stage, these stories no longer satisfied us. We had grown out of them, just as we had earlier grown out of stories about teddy bears and fairies and Jemima Puddleduck. Nearly everyone likes an adventure story sometimes, and nearly everyone has a touch of bloodthirstiness in his make-up-witness the thrillers and detective stories that are written for grown-up readers. But they will not do for our only article of diet—unless, for one reason or another, our development has stopped, and we remain at the mental age when such things are all we want. Normally,

no one wants to feed all the time off one dish only. It gets monotonous, and we want a change.

But—and this is where the opposite school of thought comes in, the formidable number of teachers and others who hold a different opinion—but, say these teachers, the hard fact is that, as you have admitted a moment ago, quite a number of people never grow out of the penny-dreadful, gangster-thriller stage of reading, and cannot read anything else. (That is, if you leave them to themselves.)

"You're assuming," one of these people said to me, "you're assuming that everyone has naturally good taste, and will pass on from this sort of reading to other sorts, as long as he's not interfered with. It isn't true, because a great many won't ever find out that there are other sorts of reading. They know what they like, and they stick to it. Unless, at some stage in their growth, preferably early, someone takes them by the scruff of the neck and compels them to read good books, there they stop."

Well—it all depends on the view you take of teaching and what it should be. Personally, I dislike from my soul this assumption, in cultural matters, that we have a right to take anyone by the scruff of the neck and compel him to read anything he doesn't want to. I believe and maintain that no sane person reads except for pleasure. If people wish to stay at an elementary stage in reading, let them. I do not see why anybody should not read what he likes, nor why anybody should read what he does not like. I believe that all a teacher may legitimately do is try to show him how much more pleasure he might get from a wider range of reading.

The real point about reading good books, well written books, true books, is that, once you are able to enjoy them, they give you *more* pleasure than the books that are less good, less well written, and less true. The only reason I ever read a book—in my spare time, that is to say—is because I expect pleasure from it. If I like it, I go on. If it bores me, I stop. No one can bully me into liking what I do not like, and I should never, never try to bully anyone else into liking what he did not like.

L. A. G. STRONG

THE HAPPY PRINCE

HIGH above the city, on a tall column, stood the statue of the Happy Prince. He was gilded all over with thin leaves of fine gold, for eyes he had two bright sapphires, and a large red ruby glowed on his sword-hilt.

He was very much admired indeed. "He is as beautiful as a weathercock," remarked one of the Town Councillors, who wished to gain a reputation for having artistic tastes; "Only not quite so useful," he added, fearing lest people should think him unpractical, which he really was not.

"Why can't you be like the Happy Prince?" asked a sensible mother of her little boy who was crying for the moon. "The Happy Prince never dreams of crying for anything."

"I am glad there is someone in the world who is quite happy," muttered a disappointed man, as he gazed at

the wonderful statue.

"He looks just like an angel," said the Charity Children, as they came out of the cathedral in their bright scarlet cloaks and their clean white pinafores.

"How do you know?" said the Mathematical Master,

"you have never seen one."

"Ah! but we have, in our dreams," answered the children; and the Mathematical Master frowned and looked very severe, for he did not approve of children dreaming.

One night there flew over the city a little Swallow. His friends had gone away to Egypt six weeks before, but he

had stayed behind, for he was in love with the most beautiful Reed. He had met her early in the spring as he was flying down the river after a big yellow moth, and had been so attracted by her slender waist that he had stopped to talk to her.

"Shall I love you?" said the Swallow, who liked to come to the point at once, and the Reed made him a low bow. So he flew round and round her, touching the water with his wings, and making silver ripples. This was his courtship, and it lasted all through the summer.

"It is a ridiculous attachment," twittered the other Swallows; "she has no money, and far too many relations"; and indeed the river was quite full of Reeds. Then,

when the autumn came they all flew away.

After they had gone he felt lonely, and began to tire of his lady-love. "She has no conversation," he said, "and I am afraid that she is a coquette, for she is always flirting with the wind." And certainly, whenever the wind blew, the Reed made the most graceful curtseys. "I admit that she is domestic," he continued, "but I love travelling also."

she is domestic," he continued, "but I love travelling also."
"Will you come away with me?" he said finally to
her, but the Reed shook her head, she was so attached to

her home.

"You have been trifling with me," he cried. "I am off

to the pyramids. Good-bye!" and he flew away.

All day long he flew, and at night-time he arrived at the city. "Where shall I put up?" he said; "I hope the town has made preparations."

Then he saw that statue on the tall column.

"I will put up there," he cried; "it is a fine position, with plenty of fresh air." So he alighted just between the feet of the Happy Prince.

"I have a golden bedroom," he said softly to himself as he looked round, and he prepared to go to sleep; but just as he was putting his head under his wing a large drop of water fell on him. "What a curious thing!" he cried; "there is not a single cloud in the sky, the stars are quite clear and bright, and yet it is raining. The climate in the north of Europe is really dreadful. The Reed used to like the rain, but that was merely her selfishness."

Then another drop fell.

"What is the use of a statue if it cannot keep the rain off?" he said; "I must look for a good chimney-pot," and he determined to fly away.

But before he had opened his wings, a third drop fell, and he looked up, and saw—Ah! what did he see?

The eyes of the Happy Prince were filled with tears, and tears were running down his golden cheeks. His face was so beautiful in the moonlight that the little Swallow was filled with pity.

"Who are you?" he said.

"I am the Happy Prince."

"Why are you weeping then?" asked the Swallow;

"you have quite drenched me."

"When I was alive and had a human heart," answered the statue, "I did not know what tears were, for I lived in the Palace of Sans-Souei, where sorrow is not allowed to enter. In the daytime I played with my companions in the garden, and in the evening I led the dance in the Great Hall. Round the garden ran a very lofty wall, but I never cared to ask what lay beyond it, everything about me was so beautiful. My courtiers called me the Happy Prince, and happy indeed I was, if pleasure be happiness. So I lived, and so I died. And now that I am dead they have set me up here so high that I can see all the ugliness and all the misery of my city, and though my heart is made of lead yet I cannot choose but weep."

"What! is he not solid gold?" said the Swallow to himself. He was too polite to make any personal remarks out

loud.

"Far away," continued the statue in a low musical voice, "far away in a little street there is a poor house. One of the windows is open, and through it I can see a woman scated at a table. Her face is thin and worn, and she has coarse, red hands, all pricked by the needle, for she is a scamstress. She is embroidering passion-flowers on a satin gown for the loveliest of the Queen's maids-of-honour to wear at the next Court-ball. In a bed in the corner of the room her little boy is lying ill. He has a fever, and is asking for oranges. His mother has nothing to give him but river water, so he is erying. Swallow, Swallow, little Swallow, will you not bring her the ruby out of my sword-hilt? My feet are fastened to this pedestal and I cannot move."

"I am waited for in Egypt," said the Swallow. "My friends are flying up and down the Nile, and talking to the large lotus-flowers. Soon they will go to sleep in the tomb of the great King. The King is there himself in his painted coffin. He is wrapped in yellow linen, and embalmed with spices. Round his neck is a chain of pale green jade, and his hands are like withered leaves."

"Swallow, Swallow, little Swallow," said the Prince, "will you not stay with me for one night, and be my messenger? The boy is so thirsty, and the mother so sad."

"I don't think I like boys," answered the Swallow. "Last summer, when I was staying on the river, there were two rude boys, the miller's sons, who were always throwing stones at me. They never hit me, of course; we swallows fly far too well for that, and besides, I come of a family famous for its agility; but still, it was a mark of disrespect."

But the Happy Prince looked so sad that the little Swallow was sorry. "It is very cold here," he said; "but I will stay with you for one night, and be your messenger."

"Thank you, little Swallow," said the Prince.

"Tonight I go to Egypt," said the Swallow, and he was in high spirits at the prospect. He visited all the public monuments, and sat a long time on top of the church steeple. Wherever he went the Sparrows chirruped, and said to each other, "What a distinguished stranger!" so he enjoyed himself very much.

When the moon rose he flew back to the Happy Prince. "Have you any commissions for Egypt?" he cried; "I

am just starting."

"Swallow, Swallow, little Swallow," said the Prince,

"will you not stay with me one night longer?"

"I am waited for in Egypt," answered the Swallow. "Tomorrow my friends will fly up to the Second Cataract. The river-horse couches there among the bulrushes, and on a great granite throne sits the God Memnon. All night long he watches the stars, and when the morning star shines he utters one cry of joy, and then he is silent. At noon the yellow lions come down to the water's edge to drink. They have eyes like green beryls, and their roar is louder than the roar of the cataract."

"Swallow, Swallow, little Swallow," said the Prince, "far away across the city I see a young man in a garret. He is leaning over a desk covered with papers, and in a tumbler by his side there is a bunch of withered violets. His hair is brown and crisp, and his lips are red as a pomegranate, and he has large and dreamy eyes. He is trying to finish a play for the Director of the Theatre, but he is too cold to write any more. There is no fire in the grate, and

hunger has made him faint."

"I will wait with you one night longer," said the Swallow, who really had a good heart. "Shall I take him

another ruby?"

"Alas! I have no ruby now," said the Prince; "my eyes are all that I have left. They are made of rare sapphires, which were brought out of India, a thousand years ago.

Pluck out one of them and take it to him. He will sell it to the jeweller, and buy firewood, and finish his play."
"Dear Prince," said the Swallow, "I cannot do that,"

and he began to weep.

"Swallow, Swallow, little Swallow," said the Prince, "do as I command you."

So the Swallow plucked out the Prince's eye, and flew away to the student's garret. It was easy enough to get in, as there was a hole in the roof. Through this he darted, and came into the room. The young man had his head buried in his hands, so he did not hear the flutter of the bird's wings, and when he looked up he found the beautiful sapphire lying on the withered violets.

"I am beginning to be appreciated," he cried, "this is from some great admirer. Now I can finish my play," and

he looked quite happy.

The next day the Swallow flew down to the harbour. He sat on the mast of a large vessel and watched the sailors hauling big chests out of the hold with ropes. "Heave a-hoy!" they shouted, as each chest came up. "I am going to Egypt!" cried the Swallow, but nobody minded, and when the moon rose he flew back to the Happy Prince.

"I am come to bid you good-bye," he cried.
"Swallow, Swallow, little Swallow," said the Prince,

"will you not stay with me one night longer?"

"It is winter," answered the Swallow, "and the chill snow will soon be here. In Egypt the sun is warm on the green palm-trees, and the crocodiles lie in the mud and look lazily about them. My companions are building a nest in the Temple of Baalbec, and the pink and white doves are watching them, and cooing to each other. Dear Prince, I must leave you, but I will never forget you, and next spring I will bring you back two beautiful jewels in ni ce of those you have given away. The ruby shall be redder than a red rose, and the sapphire shall be as blue as the great sea."

"In the square below," said the Happy Prince, "there stands a little match-girl. She has let her matches fall in the gutter, and they are all spoiled. Her father will beat her if she does not bring home some money, and she is erying. She has no shoes or stockings, and her little head is bare. Pluck out my other eye, and give it to her, and her father will not beat her."

"I will stay with you one night longer," said the Swallow, "but I cannot pluck out your other eye. You

would be quite blind then."

"Swallow, Swallow, little Swallow," said the Prince,

"do as I command you."

So he plucked out the Prince's other eye, and darted down with it. He swooped past the match-girl, and slipped the jewel into the palm of her hand. "What a lovely bit of glass!" cried the little girl, and she ran home, laughing.

The the Swallow came back to the Prince. "You are

blind now," he said, "so I will stay with you always."

"No, little Swallow," said the poor Prince, "you must go away to Egypt."

"I will stay with you always," said the Swallow, and

he slept at the Prince's feet.

All the next day he sat on the Prince's shoulder, and told him stories of what he had seen in strange lands. He told him of the red ibises, who stand in long rows on the banks of the Nile, and catch goldfish in their beaks; of the Sphinx, who is as old as the world itself, and lives in the desert, and knows everything; of the merchants, who walk slowly by the side of their camels and carry amber beads in their hands; of the King of the Mountains of the Moon, who is as black as ebony, and worships a large crystal; of the great green snake that sleeps in a palm-tree, and has twenty priests to feed it with honey-cakes; and

of the pygmics who sail over a big lake on large flat leaves, and are always at war with the butterflies.

"Dear little Swallow," said the Prince, "you tell me of marvellous things, but more marvellous than anything is the suffering of men and of women. There is no Mystery so great as Misery. Fly over my city, little Swallow, and tell me what you see there."

So the Swallow flew over the great city, and saw the rich making merry in their beautiful houses, while the beggars were sitting at the gates. He flew into dark lanes, and saw the white faces of starving children looking out listlessly at the black streets. Under the archway of a bridge two little boys were lying in one another's arms to try to keep themselves warm. "How hungry we are! they said. "You must not lie here," shouted the watchman, and they wandered out into the rain.

Then he flew back and told the Prince what he had seen.

"I am covered with fine gold," said the Prince, "you must take it off, leaf by leaf, and give it to my poor; the living always think that gold can make them happy."

Leaf after leaf of the fine gold the Swallow picked off, till the Happy Prince looked quite dull and grey. Leaf after leaf of the fine gold he brought to the poor, and the children's faces grew rosier, and they laughed and played games in the street. "We have bread now!" they cried.

Then the snow came, and after the snow, came the frost. The streets looked as if they were made of silver, they were so bright and glistening; long icicles like crystal daggers hung down from the eaves of the houses, everybody went about in furs, and the little boys were scarlet caps and skated on the ice.

The poor little Swallow grew colder and colder, but he would not leave the Prince, he loved him too well. He picked up crumbs outside the baker's door when the

baker was not looking, and tried to keep himself warm by

flapping his wings.

But at last he knew that he was going to die. He had just enough strength to fly up to the Prince's shoulder once more. "Good-bye, dear Prince!" he murmured, "will you let me kiss your hand?"

"I am glad that you are going to Egypt at last, little Swallow," said the Prince, "you have stayed too long here; but you must kiss me on the lips, for I love you."

"It is not to Egypt that I am going," said the Swallow. "I am going to the House of Death. Death is the brother of Sleep, is he not?"

And he kissed the Happy Prince on the lips, and fell down dead at his feet.

At that moment a curious crack sounded inside the statue, as if something had broken. The fact is that the leaden heart had snapped right in two. It certainly was a dreadfully hard frost.

Early the next morning the Mayor was walking in the square below in company with the Town Councillors. As they passed the column he looked up at the statue: "Dear me! how shabby the Happy Prince looks!" he said.

"How shabby, indeed!" cried the Town Councillors, who always agreed with the Mayor: and they went up to look at it.

"The ruby has fallen out of his sword, his eyes are gone, and he is golden no longer," said the Mayor, "in fact, he is little better than a beggar!"

"Little better than a beggar," said the Town Councillors.

"And here is actually a dead bird at his feet!" continued the Mayor. "We must really issue a proclamation that birds are not to be allowed to die here." And the Town Clerk made a note of the suggestion.

So they pulled down the statue of the Happy Prince. "As he is no longer beautiful he is no longer useful," said the Art Professor at the University.

Then they melted the statue in a furnace, and the Mayor held a meeting of the Corporation to decide what was to be done with the metal. "We must have another statue, of course," he said, "and it shall be a statue of myself."

"Of myself," said each of the Town Councillors, and they quarrelled. When I last heard of them they were

quarrelling still.

"What a strange thing!" said the overseer of the workmen at the foundry. "This broken lead heart will not melt in the furnace. We must throw it away." So they threw it on a dust-heap where the dead Swallow was also lying.

"Bring me the two most precious things in the city," said God to one of His Angels; and the Angel brought Him

the leaden heart and the dead bird.

"You have rightly chosen," said God, "for in my garden of Paradise this little bird shall sing for evermore, and in my city of gold the Happy Prince shall praise me."

OSCAR WILDE

THE SELFISH GIANT

Every afternoon, as they were coming from school, the children used to go and play in the Giant's garden. It was a large lovely garden, with soft green grass. Here and there over the grass stood beautiful flowers like stars, and there were twelve peach-trees that in the spring-time broke out into delicate blossoms of pink and pearl, and in the autumn bore rich fruit. The birds sat on the trees and sang so sweetly that the children used to stop their games in order to listen to them. "How happy we are here!" they cried to each other.

One day the Giant came back. He had been to visit his friend the Cornish ogre, and had stayed with him for seven years. After the seven years were over he had said all that he had to say, for his conversation was limited, and he determined to return to his own castle. When he arrived he saw the children playing in the garden.

"What are you doing here?" he cried in a very gruff

voice, and the children ran away.

"My own garden is my own garden," said the Giant; "anyone can understand that, and I will allow nobody to play in it but myself." So he built a high wall all round it, and put up a notice-board.

TRESPASSERS

WILL BE

PROSECUTED

He was a very selfish Giant.

The poor children had now nowhere to play. They tried to play on the road, but the road was very dusty and full of hard stones, and they did not like it. They used to wander round the high walls when their lessons were over, and talked about the beautiful garden inside. "How happy we were there!' they said to each other.

Then the Spring came, and all over the country there were little blossoms and little birds. Only in the garden of the Selfish Giant it was still winter. The birds did not care to sing in it as there were no children, and the trees forgot to blossom. Once a beautiful flower put its head out from the grass, but when it saw the notice-board it was so sorry for the children that it slipped back into the ground again, and went off to sleep. The only people who were pleased were the Snow and Frost. "Spring has forgotten this garden," they cried, "so we will live here all the year round." The Snow covered up the grass with her great white cloak, and the Frost painted all the trees silver. Then they invited the North Wind to stay with them, and he came. He was wrapped in furs, and he roared all day about the garden, and blew the chimney-pots down. "This is a delightful spot," he said, "we must ask the Hail on a visit." So the Hail came. Every day for three hours he rattled on the roof of the castle till he broke most of the slates, and then he ran round and round the garden as fast as he could go. He was dressed in grey, and his breath was like ice.

"I cannot understand why the Spring is so late in coming," said the Selfish Giant, as he sat at the window and looked out at his cold, white garden; "I hope there will be a change in the weather."

But the Spring never came, nor the Summer. The Autumn gave golden fruit to every garden, but to the Giant's garden she gave none. "He is too selfish," she said.

So it was always Winter there, and the North Wind and the Hail, and the Frost, and the Snow danced about through the trees.

One morning the Giant was lying awake in bed when he heard some lovely music. It sounded so sweet to his ears that he thought it must be the King's musicians passing by. It was really only a little linnet singing outside his window, but it was so long since he had heard a bird sing in his garden that it seemed to him to be the most beautiful music in the world. Then the Hail stopped dancing over his head, and the North Wind ceased roaring, and a delicious perfume came to him through the open easement. "I believe the Spring has come at last," said the Giant; and he jumped out of bed and looked out.

What did he see?

He saw a most wonderful sight. Through a little hole in the wall the children had erept in, and they were sitting in the branches of the trees. In every tree that he could see there was a little child. And the trees were so glad to have the children back again that they had covered themselves with blossoms, and were waving their arms gently above the children's heads. The birds were flying about and twittering with delight, and the flowers were looking up through the green grass and laughing. It was a lovely scene, only in one corner it was still winter. It was the farthest corner of the garden, and in it was standing a little boy. He was so small that he could not reach up to the branches of the tree, and he was wandering all round it, erying bitterly. The poor tree was still covered with frost and snow, and the North Wind was blowing and roaring above it. "Climb up! little boy," said the Tree, and it bent its branches down as low as it could; but the boy was too tiny.

And the Giant's heart melted as he looked out. "How selfish I have been!" he said, "now I know why the Spring

would not come here. I will put that poor little boy on the top of the tree, and then I will knock down the wall, and my garden shall be the children's playground for ever and ever." He was really very sorry for what he had done.

So he crept downstairs and opened the front door quite softly, and went out into the garden. But when the children saw him they were so frightened that they all ran away, and the garden became winter again. Only the little boy did not run for his eyes were so full of tears that he did not see the Giant coming. And the Giant stole up behind him and took him gently in his hand, and put him up into the tree. And the tree broke at once into blossom, and the birds came and sang on it, and the little boy stretched out his two arms and flung them round the Giant's neck, and kissed him. And the other children when they saw that the Giant was not wicked any longer, came running back, and with them came the Spring. "It is your garden now, little children," said the Giant, and he took a great axe and knocked down the wall. And when the people were going to market at twelve o'clock they found the Giant playing with the children in the most beautiful garden they had ever seen.

All day long they played, and in the evening they came

to the Giant to bid him good-bye.

"But where is your little companion?" he said: "the boy I put into the tree." The Giant loved him the best because he had kissed him.

"We don't know," answered the children: "he has

gone away."

"You must tell him to be sure and come tomorrow," said the Giant. But the children said that they did not know where he lived and had never seen him before; and the Giant felt very sad.

Every afternoon when school was over, the children

came and played with the Giant, but the little boy whom the Giant loved was never seen again. The Giant was very kind to all the children, yet he longed for his first little friend, and often spoke of him. "How I would like to see him!" he used to say.

Years went over, and the Giant grew very old and feeble. He could not play about any more, so he sat in a huge arm-chair, and watched the children at their games, and admired his garden. "I have many beautiful flowers," he said, "but the children are the most beautiful flowers of all."

One winter morning he looked out of his window as he was dressing. He did not hate the Winter now, for he knew that it was merely the Spring asleep, and that the flowers were resting.

Suddenly he rubbed his eyes in wonder and looked and looked. It certainly was a marvellous sight. In the farthest corner of the garden was a tree quite covered with lovely white blossoms. Its branches were golden, and silver fruit hung down from them, and underneath it stood the little boy he had loved.

Downstairs ran the Giant in great joy, and out into the garden. He hastened across the grass, and came near to the child. And when he came quite close his face grew red with anger, and he said, "Who hath dared to wound thee?" For on the palms of the child's hands were the prints of two nails, and the prints of two nails were on the little feet.

"Who hath dared to wound thee?" cried the Giant, "tell me, that I may take my big sword and slay him."

"Nay," answered the child: "but these are the wounds of love."

"Who art thou?" said the Giant, and a strange awe fell on him, and he knelt before the little child.

And the child smiled on the Giant, and said to him,

"You let me play once in your garden, today you shall come with me to my garden, which is Paradise."

And when the children ran in that afternoon, they found the Giant lying dead under the tree, all covered with white blossoms.

OSCAR WILDE

3 4 1-

SHAKESPEARE

Almost in the centre of England stands the old town of Stratford-on-Avon. It is a beautiful old-world town which has thousands of visitors every year. They come from the four corners of the world to visit the birthplace of the most famous poet of all time, Shakespeare. Stratford-on-Avon is always considered Shakespeare's town, although his great work was done in London, but there is no doubt that much of his inspiration came from the wonderful country near his home town.

If you visit Stratford you will find many reminders of Shakespeare and his times. There is the house where he was born, the Grammar School which he attended, and the old farmhouse in a neighbouring village where his wife lived. He was born on 23rd April, 1564, to parents who, whilst not very rich, were in comfortable circumstances. His father dealt in meat, skins and similar products, and when he was old enough William was sent to Stratford Grammar School, His schoolmaster, Master Roche, believed that to spare the rod was to spoil the child, and we can be sure school was not a very pleasant place. Lessons commenced at six o'clock in the morning, and with half an hour's interval for breakfast they continued until half-past cleven. Afternoon school started at one o'clock, and continued until half-past five, with only one half-hour's interval. At lunch William would wait on his parents at table, and when that had finished he would start. He would always address his father as Sir.

At thirteen years of age Shakespeare had to leave the grammar school, as his father's business had declined and he had become a poor man. Nobody really knows what Shakespeare did in the next five years. We do know, however, that when he was eighteen he married Anne Hathaway, a lady eight years his senior. We believe the marriage was not very successful, and when Shakespeare was twenty-one we hear of him going up to London. Some writers say that he left Stratford in a hurry as he had got into trouble poaching deer on the estate of Sir Thomas Lucy, at Charlecote, three miles out of Stratford. It may have been so, but it was a common practice of bright young men in those days to go up to London to seek their fortunes.

Of his first eight years in London, nothing is known. Many people think he must have travelled abroad, so great is the knowledge of foreign customs and characters shown in his plays. Whatever he did, he must have mixed with "all sorts and conditions of men", and that is a fine education for an alert mind. We can be sure he had visited both the London theatres, the Curtain in Moor Fields and the Theatre in Shoreditch. Both theatres were outside London in those days, and gentlemen rode on their horses to either of them. Some people say that Shakespeare held the gentlemen's horses at one time. We do know for certain, however, that he soon obtained work in the theatre. Later he became an actor, and afterwards was employed altering plays and making them suitable for stage production. Of course, there were no actresses in those days, women's parts being taken by boys. That is one reason why several of the women in Shakespeare's plays act as men for part of the play (Rosalind, Portia). It is not a long step from adapting plays to writing plays, and when he was twenty-seven Shakespeare wrote his first play, Love's Labour's Lost.

During the next twenty years Shakespeare wrote thirtyseven plays. He became very rich and popular, having many friends among the noblemen at the court. Queen Elizabeth was very fond of his poetry, which he read to her, and of his plays, which he had acted at court. Fame and popularity did not spoil Shakespeare, the man. He was anxious to retire to his native town, and in 1597 he bought New Place, then a large house in Stratford.

In the year 1610 Shakespeare settled for good in Stratford. His mother was dead, but his father was still living. His eldest daughter had married a local doctor, and his other daughter Judith lived with her mother. In February, 1616, he attended Judith's wedding at Stratford, and a few days later he entertained some of his old London friends, among them Ben Jonson, a great writer. As soon as they departed people noticed that Shakespeare looked ill. On 23rd April, 1616, he passed away, leaving behind him his incomparable bequest to us.

The fact that we know so little of Shakespeare's private life has given rise to much speculation and much "guesswork" as to how he lived. Apart from parish registers, and a few references to him in the works of others, there is not a large amount of data available, but in his plays and poems we find many utterances which learned men have construed into facts. The fact that the mean and spiteful Justice Shallow in The Merry Wives of Windsor is said to be a pen-portrait of Sir Thomas Lucy has led people to believe that the story of his deer poaching on Sir Thomas Lucy's estate is absolute fact. Other critics think that because his references to foreign countries are so accurate he must have been a much travelled man, and could not possibly be the man we think him to be. These people forget that the Elizabethan Age was one of travel and adventure, and that London was full of men who were "much travelled".

The theatre for which Shakespeare wrote was a very different affair from the theatre of today. It was a crude structure with the stage in the middle and the pit open to the skies. In the pit apprentices and poorer workmen stood and jostled each other, while the people who could afford to sat in covered galleries round the outside. At the side of the stage, young gallants sat drinking and smoking. Ladies seldom went to the theatre, and if they did, they wore masks. It was not considered "quite the thing" for ladies to visit such a place. There was no scenery, but a few properties such as a barrel for an inn, a sail for a ship, a few branches for a wood, would represent the scene. The audience no doubt had much more imagination in those days.

Shakespeare was fortunate to live in times when many famous poets and writers were contemporary. It is said that he was friendly with Christopher Marlowe, who was a poet and dramatist of no mean order. There is no doubt that Marlowe's works had considerable influence on Shakespeare. Then there was "Rare Ben Jonson", Dekker, Middleton, Massinger and Webster, and Greenc. What a fine company of geniuses these must have made as they gathered together at the Mermaid Tavern, in Bread Street, in the City. The advent of the plague during 1593-4 interrupted his play-writing, as the theatres were closed, and so he turned to poetry. He wrote two very long poems, Venus and Adonis and The Rape of Lucrece, dedicating them to the Earl of Southampton, who made him a present of £1,000, which was a large sum in those days.

Between the years 1600 and 1606 Shakespeare wrote

Between the years 1600 and 1606 Shakespeare wrote his most famous tragedics, Hamlet, Othello, Macbeth, and King Lear. He also wrote The Merry Wives of Windsor to please Queen Elizabeth, who, we are told, wanted him to write a play showing the huge bucolic Falstaff in love. No writer ever portrayed such a large number of charac-

ters, all so different and yet so living. His characters are no ciphers, but real flesh and blood people with whom we laugh or are sad according to the occasion. To create such subjects consistently is the work of a genius such as the world cannot hope to see in every generation.

G. HOLROYD

CHARLES DICKENS

CHARLES DICKENS was born at Portsea on Friday, 7th February, 1812. His father was a clerk in the Navy Pay Office, and was removed to Chatham when Dickens was four. There Dickens went to school and visited Gadshill, where Falstaff robbed the travellers. He often admired the house which stood on the highest part of the hill, and determined to work hard so that he might one day buy it. It seemed an impossible dream, but it did so happen after Dickens had become famous.

In his tenth year the family left Chatham and settled down in a mean street in London. Things went from bad to worse until Dickens's father was imprisoned for debt and the family home sold up. Charles had to turn out to work. A relative in business offered him a job which he was forced to take. He had to paste labels on to jars of blacking in a warehouse which could only be described as a hovel with scarcely a complete pane of glass. He was paid six shillings a week, and had to live in miserable lodgings, and for two years he never had sufficient to eat. His poverty, however, brought him into contact with the homes of the very poor, with their modes of life, their hopes and fears. This was of great value to him when he became an author.

After two years Dickens's father came into some money, enabling him to leave prison and send Charles to a private school. After his schooldays, which were very happy, he became a clerk in a lawyer's office, and in his spare time studied shorthand. When he was nineteen he became a

reporter for a newspaper, and his job was to attend the House of Commons for his paper. He was often sent, also, into the country to report on proceedings, and his experiences "on the road" are found in some of his novels.

About this time Dickens wrote a sketch and signed it "Boz". It was accepted by the Monthly Magazine who printed nine other similar sketches. Later he continued the series in another journal, and readers were charmed with their humour. Dickens was now on the first rung of the ladder of literary fame. A firm of publishers asked Dickens to write the letterpress for a number of amusing pictures they had bought for publication. Thus was born the famous Pickwick Papers. In the fifth number he introduced Sam Weller, and Sam became the idol of the public. People quoted his funny sayings and everybody talked about him. The binder had prepared 400 copies but more than 40,000 were sold. Dickens followed up this triumph with a quick succession of novels, among them Oliver Twist, Nicholas Nickleby, The Old Curiosity Shop and Barnaby Rudge. Oliver Twist was not very popular, and at first Nicholas Nickleby and The Old Curiosity Shop were his outstanding successes.

After a serious illness he visited the United States in 1841, where he was lionized. On his return, however, he wrote his American Notes which offended many people in the United States. He then wrote his masterpiece, Christmas Carol, which had an astonishing success. In 1846 Diekens became the editor of the Daily News, but he soon gave up that post and went for a time to Switzerland, where he wrote Dombey and Son, which was very successful. In 1849 he began to publish David Copperfield, and to edit a weekly journal, Household Words. He bought Gadshill House in 1856, realizing an ambition of his youth. He now began to give readings of his works, touring all over the British Isles. It was a great strain on him and, no

TACT

Once upon a time there was a very rich old man.

He was also a very miserly old man.

And, as is often the way with very rich, very miserly old men, he had a number of poor but expectant relations who would not let him alone.

At Christmas time especially they thronged about him and showered presents upon him in the hope of one day receiving a recompense for their generosity.

They brought him gifts suited to his declining years, such as a pillow-rest for his rheumatic back and a footstool for his gouty foot, and a handbell to summon assistance in case of a sudden attack, and a book of devout reflections to turn his thoughts from worldly matters, and a fountain pen in case his thoughts should revert to worldly matters and he might suddenly desire to make a will in their favour.

But strange to say, these gifts only incensed the very rich, miserly old man and added to the dislike he already felt for his poor but expectant relations.

On Christmas Eve a certain graceless nephew returned from a sojourn abroad and, having nowhere to spend his holiday, thought he might as well look up the old man. He forgot all about the family custom of making presents until he was in the train, when it was too late to make a purchase. Nothing daunted, however, he examined his correspondence, which in his haste he had brought with him to read on his journey. Being a popular if graceless young man, there were small remembrances from many

friends, and amongst them he presently discovered something that he thought would do.

On his arrival he found the usual crowd engaged in

presenting the usual gifts to an unwilling recipient.
"Uncle," he said cheerfully, "you look years younger than when I saw you last. I have here a small remembrance which is of no value, but which will, I hope, be of use to you."

His uncle scowled and took the parcel. Upon opening it, however, his face cleared, and he embraced his graceless nephew so cordially that the other poor but expectant relations faded from the scene in amazement and chagrin.

The gift was a calendar for the next ten years.

You will be prepared to hear that the very rich old man made a new will, leaving his entire fortune to his graceless but tactful nephew.

And so he did. But you must remember that he was a miserly old man and therefore had an abhorrence of waste. So, lest the calendar should be wasted, he took special pains to live the whole ten years longer, and before that length of time had elapsed the graceless nephew had himself unfortunately died of dissipation.

B. N. SAXELBY

THE SAD STORY OF A LOST MEMORY

I HAD not noticed the man sitting beside me on the bus until he addressed me.

"Excuse me, sir," he said, "but is my face familiar

to you by any chance?"

I turned and studied his lineaments for a second or two. His features were not altogether prepossessing, and it was with some relief that I was able to assure him that he was an entire stranger to me.

He did not seem at all surprised.

"It was just a chance," he said. "You see, sir, I am under the disadvantage of not knowing who I am."

I murmured my sympathy.

"I have just returned from a voyage," he continued, "during the course of which I had the misfortune to lose my memory. I understand from information received that I was seated one fine day on the yard-arm in a favourite position of mine, when suddenly and without warning the ship gave a lurch and I was hurled from my somewhat insecure perch to the deck forty feet below.

"I fell on to my head, but suffered little inconvenience

save, as I have said, a complete loss of memory.

"I was, however, unconscious for some three days, and during this period my pockets were thoroughly rifled, all my possessions on the ship stolen and all trace of my identity removed. Even the name of my tailor was cut out from the suit I was wearing!

"I reported the occurrence to the captain of the boat, who made a thorough investigation, which did not, how-

ever, lead to the discovery of the thief.

"The purser informed me that my name was Jones, but I was unable to glean any further particulars about myself. I had, it appeared, kept strictly to myself on the boat and was personally unknown to any of my fellow-passengers.

"Everyone agreed that there was only one possible remedy, namely, that I should receive another violent blow on the head, which would, as all the authorities

say, restore my memory to its former state.

"The idea was taken up enthusiastically, and I will gladly admit that all the ship's crew and also the passen-

gers did what they could for me in this respect.

"It became quite customary for everyone who met me to hit me playfully over the head with anything that was handy—a marline-spike, a gunwale or some other little weapon:

"At deck-cricket, too, I was always placed in the most exposed position possible, and batsmen kindly made a point of driving the ball at my head with all the force they

could command.

"With all these helps I received a great many blows on the head, but, whether it was that none of them touched the exact spot or whether they were none of them quite hard enough, I cannot say; at any rate my memory stubbornly refused to return."

Mr. Jones paused in his recital.

I raised my walking-stick, a stoutish ash.

"This is but a poor weapon, I'm afraid," I said; "still, any little service I can render—"

"No, no," said Mr. Jones hurriedly, "the time for that is past.

"The ship's doctor, who had himself been only too kind

in hitting me over the head with a bottle or a chair whenever possible, had at last to issue a general warning that my head would stand no more blows. Indeed, I had myself realized for some time that these well-meant attentions were increasingly embarrassing and painful.

"There was universal disappointment at the doctor's decision, especially on the part of my cabin-steward, who had developed great accuracy in hurling my own boots at

my head.

"The voyage therefore came to an end without my identity having been established; and thus, alas, it still remains!

"I am now endeavouring to gather funds to enable me to prosecute inquiries at the port from which the boat sailed, and should you, kind sir..."

F. R. BARRATT

FIGHTING THROUGH

A Fire Story

I was dozing in the study about half-past nine one evening when my wife abruptly disturbed me.

"Henry, I think the house is on fire," she cried.

I woke up at once.

"You think?" I replied. "You ought to know."

"I can smell something burning. Can't you?"

"Yes," I agreed presently, "I can. What is it?"

"Never mind what it is," she said. "Come and put it out."

Hand-in-hand, for she had torn me out of my chair, we passed into the hall. It was full of smoke. I began to cough and my eyes started smarting painfully.

"Rose is out," my wife informed me. "What on earth

are we to do?"

She spoke as if the quelling of fires was one of the outstanding accomplishments of our treasure.

"I am here, dear," I reminded my wife. "Leave every-

thing to me. One thing at a time."

Meanwhile the smoke seemed to increase in density and, though no coward, I felt that the investigation of a blazing basement might be a terrible ordeal.

"Do-do something, Henry, for goodness' sake."

Now, if ever, seemed to be the time to use the telephone. I grasped the receiver. Smoke wreaths curled up my nostrils. Clearly no time must be lost. "Exchange! Fire!" I screamed.

There ensued a period of terrible suspense.

"Hello," said Exchange suddenly, "I want rou," Clickclick-brr-Tohnson at the other end, a neighbour of ours.

"Hello-that you, Coot?"

"Hello," I said. "Look here—"
"Hello—is that Coot speaking?"

"Yes, it's me, but---"

"Can you golf tomorrow?"

"Yes, but-" (Here I broke down, coughing.)

"Can't hear, old boy."

"We're on fire! Gerroff line-" (Here I choked.)

"Can't hear, old boy."

My wife, who had been dancing with impatience, snatched the receiver away from me.

"Do get off the line, Mr. Johnson," she said; "we're on fire-fire! Bother the man; he won't understand. FIRE!" she screamed at the top of her voice. "We want the engine. Get off the line. No, no, not an engine off the line."

She threw down the receiver on to its hook and turned to me in a state of incipient imbecility.

"The fool thinks it's a railway accident."

"He would," I said.

Telephone-bell. Johnson again.

"Hello-cut off, weren't we?" he began brightly. "Touching this golf game. Hello-are you there?"

I tried to stop coughing and articulate slowly and distinctly.

"Johnson, our house is on fire," I said. "We want the fire-engine. Our house is on fire. We want the fire-engine. Our house-"

At last he seemed to understand.

"Your house?" he shouted. "Good Lord! You'd better ring up the brigade. Don't bother about looking up their number. Just call 'Fire!' and you'll be put straight through to the fire-station. Ring up the police too, I should. Don't bother about looking up their number either. Just say 'Police!' and you'll be put straight through to the police-station. I'll get off the line so as to give you a clear call. Good Lord! Good-bye."

He rang off.

My wife and I succumbed to a bad fit of coughing, as much from exasperation as from the smoke.

"You'd better go downstairs," my wife suggested, as

soon as she could speak.

"Yes, in a moment," I replied, and took up the telephone receiver.

"Hello," I said—"hello—" This time I got straight

through.

"Hello-yes, hello-what, what-who is it?" inquired an excited voice.

Good heavens! the line has not been cleared and there

was Johnson again.

"It's Coot," I panted. "Want to get fire-station—ring off."

He lost his head.

"I'll try from this end," he shricked. "Fire! Fire! Police! Fire! Police—"

We shouted together, furiously rattling receiver hooks, "Exchange! Exchange!"

"Number, please?"

"FIRE! POLICE!" we bellowed as one man.

Click—click—brr—click—whizz—

"P'leece," said a far-away gruff voice.

"Fire!" I screamed.

Somehow or other Johnson had also got through, and we all began talking together.

"'Ullo, 'ullo! 'Ow many more of you on the line?"

"FIRE!" I reiterated, and gave my name and address.

I could hear Johnson giving his, though goodness only knew what for,

"Whose fire is it?" demanded the P'leece.

"Mine," I sobbed at him. "292, Pembroke Road."

The officer took a long time to come to a decision.

At last he said, "I can't leave the station."

This infuriated me beyond all bounds.

"Nobody wants you to," I roared. "We want the brigade to leave the station, and precious quickly too. We just thought you ought to know, that's all. Get off the line-you-you-"

A frightful spasm of cougling precluded further speech and I groped for my wife. She was gone. Good heavens! was she even at this moment lying insensible in a holoeaust? Panic-strieken, I attacked the telephone once more. At all costs the alarm must be given. Shouting some words of comfort which I hoped would reach my wife's ears, I found myself being heekled by the supervisor, Breathlessly I explained the urgency of the position. The supervisor did her best. After what seemed an eternity I heard a voice say, "Fire station." Through at last.
"FIRE!" I gurgled. "292, Pembroke Road."
"The brigade's gone out," I was informed briefly.

It was the final blow. As I recled beneath it I fell into the arms of my wife, who had just emerged from the haze.

"The brigade's gone out," I said wildly.
"So's the fire," slic replied. "I went downstairs. It was only your socks scorehing in the kitchen and the register had fallen down, so no wonder the place was full of smoke. I do think you might have gone with me."

My relief was tremendous.

"The main thing," I said, "is that you, darling, are safe. I thought I had lost you—my right hand."

"Don't be silly," she rejoined; "all you lost was your head."

At this juncture the telephone-bell rang once more. It was Johnson again, apparently demented.

"Hello, Coot!" he yelped. "Hold on, old boy; I'm at a fire-station—ran all the way. I'm coming round now—ON THE ENGINE!"

His voice rose to a frenzied scream and he was gone before I could answer.

"Johnson's coming on an engine," I reported faintly.

"And there's nothing to put out," said my wife.

I was struck by a happy idea.

"You can put out the whisky," I said. "Let us at least welcome our friends as warmly as we can."

RALPH WOTHERSPOON

THE MIRACLE OF RADIO

The Idea of Maxwell, Hertz and Marconi

TELEGRAPH, telephone, radio: the story of the conquest of communication by electrical energy has three chapters, and the marvels of the first and second pale before the miracle of the third. Even today, with the whole world encircled and indebted in a thousand ways to this most modern child of Hermes the Messenger, we are only at the beginning of its vast possibilities. Tomorrow the science of healing, the control of vast forces, navigation, aeronauties, television, the amenities of life in a score of directions, will be dependent on these electrical waves which need no wires to guide them, but spreading in all directions with the rapidity of light find the instruments tuned to receive them, or directed into a beam travel straight to their goal through that unknown element which at present we call the other.

The names of three men—an Englishman, a German, and an Italian—stand out from the many who have opened up for us this new path of progress: James Clerk Maxwell, Heinrich Hertz and Guglielmo Marconi. Maxwell prophesied wireless, discovering its principles; Hertz discovered and demonstrated those waves which are its secret; and Marconi invented the instruments which put these ideas to practical use. A crowd of other brilliant men have made their different contributions. Sir Oliver Lodge came very near to doing what Marconi did; indeed, a year before Marconi invented his instrument, L

demonstrated the possibility of sending a signal by these Hertzian waves, but turned aside under pressure of other work. Professor Righi, Marconi's science master, experimented in the laboratory and showed young Marconi the potentialities. Oliver Heaviside, the English telegraphic engineer, subsequently revealed to us the amazing fact that these wireless waves are thrown back to the earth from the two curious "mirrors" which, moving in the depth of the sky hundreds of miles from the surface of the earth, act as a kind of double sounding-board. These are but a few of the men whose work all over the earth has brought the miracle of wireless to its present stage. But the three names stand pre-eminent.

James Clerk Maxwell was born in 1831. A brilliant scientist, with the kind of intuitive genius we associate with Newton, he had a theory that light and electricity were in some way parts of the same thing. But how to prove it? That might well have seemed a hopeless task, until he planned to measure the movements of the waves of electricity and those of light; for he felt sure that this electrical energy did move in waves, those forms which move through space in a regularly repeated shape. The waves of the sea moving through water; the waves of sound moving through the air from some vibrating instrument; the waves of light and electricity moving through the ether; could he establish the measurements of these last? Could he give the "wave-lengths," i.e., the space between crest and crest, and the frequency, i.e., the time it took each wave to pass any given point in space? In his day no instruments had been made which could register the enormously long waves of electricity. All his work, therefore, lay in the realm of mathematics, of calculation, and the prophecy from this. His triumph was the discovery that, as he had hoped, light waves and electric waves moved at the same speed, something like 186,000

miles per second. Wireless, the undiscovered, was to establish the link between them.

Twenty-three years after Maxwell had made this discovery, Heinrich Hertz proved the truth of his theory. By that time it was possible to make tests with electric currents of shorter frequency. Using these, he revealed that the waves of electricity behave exactly as other waves in nature do. But all Hertz could do was to demonstrate across the few feet of a laboratory, for there did not yet exist any instrument which could magnify the received waves with sufficient strength to use them for any kind of signal. The new waves-Hertzian waves they were called in honour of their discoverer-finally established the possibility of wireless communication. Again there was a pause while the right man came into the world to bring these discoveries of abstract science into the practical service of mankind. In 1894 Oliver Lodge showed that it could be done, and had he pursued that line of research might easily have added to his triumphs this of practical radio. But over in Italy a twenty-year-old scientist had become obsessed with this idea.

Guglielmo Marconi was the son of an Italian father and an Irish mother, with his home near Bologna. His master of physics, Professor Righi, had shown him that the waves of electricity pass through the earth and jump intervening space so that their faint crackle could be heard in a receiver placed some distance from the other end of the wire. Hertz had received those. Another experiment of Professor Righi's told the same story. He had two coils of wire placed some distance apart. In one of them there was a gap of several inches, and through this coil the Professor sent a charge of electricity. With a flash of electric fire the current jumped the gap and, more miraculous still, the other coil of wire lying apart received the shock sent out by the flash. From every experiment

the same truth was apparent—electric force did not need wires to carry it from point to point, it could jump space.
With funds supplied by his father, young Marconi

With funds supplied by his father, young Marcon pursued this truth, experimenting across the garden of his father's house. Two poles at opposite ends of the garden; a wire with a spark gap; a Morse telegraph key to release and control the current; a telephone receiver at the other pole which would receive the dots and dashes of the Morse code. Hertz had received those waves at a distance of a few feet; Marconi obtained them at a distance of a mile. He discovered that a hill between his transmitter and his receiver made no difference—the magic waves went through matter as easily as they passed through air. The problem was to produce signals strong enough to be recorded, and this depended firstly on having a good length of aerial in which the electrical vibrations could take place. Marconi made the discovery that if he placed his aerial vertically instead of horizontally, he obtained maximum strength. It acted as though he had doubled the length of his aerial, as though one half of it were buried in the earth.

Marconi came to England and submitted his invention to the British Government in 1896, and the next year the Marconi Wireless Telegraph Company was founded. He interested the British Post Office and experimented from the roof of the General Post Office at St. Martin's le Grand in London. He worked on Salisbury Plain, and then sent messages across the Bristol Channel. In 1898 the invention was used in the British naval manœuvres; the next year, signals were sent across the English Channel. Marconi's dream of linking nation to nation drew nearer. One moment of triumph came when Queen Victoria, staying at Osborne House, sent a message to the Prince of Wales on board the Royal Yacht, for not the least part of Marconi's vision was that ships at sea could be kept in

constant touch with the land and with each other. Another possibility became certainty when the *Dublin Daily Express* used the invention to report the Kingstown Regatta.

But all these pioneering experiments and applications were over comparatively short distances, and the doubters still did not believe in the unlimited range. They argued that the curve of the earth would interfere. Marconi planned his supreme test. At Poldhu, in Cornwall, he set up his signal station, and during the December of 1901 he crossed quietly to Newfoundland. He did not dare to disclose a plan which might fail, but he had arranged with his assistants in Cornwall that at a certain hour of a certain day they should transmit the three-dots signal of Morse, and he would listen in on a telephone attached to a nine-foot kite flying four hundred feet in the air. If the electric spark could be recorded over 3,000 miles of sea, all things seemed possible. On the test day the men in Cornwall flashed a spark a foot long and as thick as a man's wrist across the gap in the enormous coils of wire, and at that moment, in distant Newfoundland, Marconi heard the treble signal. Wireless had conquered space.

Since those days there has been no turning back. Marconi himself superintended the establishment of a wireless set which recorded on shipboard news from the land. In 1903 a ship used wireless for the first time to send distress signals, when the liner *Republic* collided with another in the Atlantic; and the long record of saving life at sea by wireless began. Today every ship is equipped and keeps in constant communication with the land.

In 1924 Marconi carried his invention one important step forward when he arranged a method of directing the wireless waves in a straight line. It spelled a tremendous advance, but this whole invention is continually expanding into fresh triumphs. The world of the future will use these electric waves in ways now only dreamed of, for they are the most potent, the most unlimited form of power which the mind of man has conceived. The day is not far distant when aircraft will be directed from the ground by wireless energy; when medicine will turn it to its purpose of healing; when all communication, public and private, will be by this means; and the dream of the twenty-yearold Italian boy to use the discoveries of the British and German scientists will find its ideal fulfilment in a world completely in communication.

HORACE SHIPP

a 10 p

THE SIGN OF THE RED CROSS An Idea of Henri Dunant

On 24th June, 1859, at the tiny Lombardy town of Solferino, was waged one of the bloodiest battles of history. The Sardinian and French allies under Napoleon the Third stormed the town held by a strong force of Austrian soldiery under the command of the Emperor Franz Joseph. As though the elements themselves shared this mad violence of war a tremendous storm raged over the battlefield, lightning and thunder mingling with the roar and flash of cannon and musketry. For fifteen hours the carnage lasted, and when at last the Austrians broke and fled they left more than forty thousand wounded behind.

One strange spectacle of the ordered world intruded upon this nightmare scene: a private carriage drove to the battlefield, its occupant a young man of about thirty, dressed rather immaculately in a fashionable white coat. His name was Jean Henri Dunant. He was a French banker and company promoter, and his presence at Solferino that tragic day was in connection with his business, for he had been trying to obtain from the French Government certain concessions in connection with a business venture in Algeria, and being refused by the Colonial Department in Paris, had decided to go personally to the Emperor Napoleon in the midst of the successful campaign against the Austrians and urge his case. That business mission failed; Dunant did not find the Emperor on the fateful day. Indeed, so far as his business affairs

were concerned, he sowed the seeds of ruin on the bloodstained battlefield, for something took hold of Henri Dunant which was destined to sweep all else out of his life. Horror, pity, the need of helping human suffering at its most dire; these things took possession of him, broke the coinfortable pattern of his life and built it anew in a symbol which today the whole world knows: the merciful symbol of the Red Cross.

At first it was only the immediate urge to help the thousands upon thousands of wounded men who lay in agony where they had fallen, their wounds putrefying under the blazing sun, their tongues blackened with thirst, their minds maddened with pain and despair. Into this inferno the man with the white coat plunged to give what help he could. Carrying water and wet lint he bathed the wounds, bound them where he could, gave drink to the thirst-maddened creatures who clutched at him as he passed. Day after day it went on. In the neighbouring village of Castiglione he improvised some sort of shelter in the houses. He recruited a band of 300 helpers, and sent them out over the battlefield. At one point he found a company of more than five hundred wounded men in a church, men who for five days had been totally forgotten and left to the horrors of their wounds, fever, thirst. hunger and vermin. French, Austrians, Slavs, Arabs. Germans: friends and enemies lay together in the horror which followed battle.

"Siamo tutti Fratelli."

"We are all brothers": it became the watchword of that band of helpers which Dunant recruited among the simple Italian peasantry: the watchword of mercy.

Back in Paris and in his native Geneva, Henri Dunant tried to forget, to turn again to his business affairs. But when Destiny has taken a man by the sleeve, she does not so lightly loosen her hold. At first he was physically ill with the terrible strain of those days in Lombardy, and even when his health recovered his mind could not free itself from what he had seen. His business no longer seemed of paramount importance: the Algerian company went from bad to worse, his shareholders became restive.

In 1861 he tried to exorcise this thing. He wrote an account of what he had seen in a tiny book. A Memory of Solferino he called it, and he printed a thousand copies and sent them to his influential friends. That booklet was Destiny's second move. It was a piece of realism which might have formed a chapter of Tolstoy's War and Peace, and it stirred the conscience of Europe. Like a flame it ran across the world. Edition after edition was needed; and wherever it went men and women asked: What can be done?

Four of Dunant's friends in Geneva especially turned themselves to the task. General Dufour; Gustave Moynier, the energetic President of the Geneva Welfare Society; Dr. L. P. Amédéc Appia; and Dr. Theodore Maunois, a wealthy surgeon. With Dunant himself they formed a committee of five, and they began by issuing invitations to an International Conference at Geneva. Dunant went forth as the ambassador for the venture. His book had already made influential friends for the eause, and Dunant went from country to country, urging the idea upon government officials and great personages in court and other circles. He wrote thousands of letters, sent more and more copics of the book, interviewed, begged. Where he could not go, he wrote, as he did to Abraham Lincoln, from whom he obtained two American delegates. The French Minister of War attacked him, declaring that his Souvenir was an indictment of France, and forthwith Dunant went over his head to the Emperor and secured Napoleon's interest.

In October, 1863, the first Conference was held at

Geneva. Twenty-three delegates from seventeen nations met under the presidency of Moynier, with Dunant acting as a secretary. During that four days' Conference Dunant did not speak. Moynier, the able lawyer, more and more took matters in hand; and maybe Dunant, like many another pioneer dreamer, watched almost in fear his winged vision settle down to the common clay of practical fact.

The next year the Swiss Federal Government issued the invitation to the Conference, and that year the first Geneva Convention was drafted and agreed, and the rules for the care of the wounded became part of international law. The basis has never been changed. Convention after convention has been needed to expand the work, but the principles which were established in 1864 have always remained.

It was in 1864, too, that the organization was called to justify itself in the Prussian war against Denmark. Dr. Appia, undertaking active service for the wounded, wore as an armlet a Red Cross on a white field. For that token of mercy he obtained recognition from civil and military authorities alike. And the great work found its symbol. The armlet which Dr. Appia wore eighty years ago is still one of the treasures of the International Committee.

And Henri Dunant? Perhaps that is the strangest part of the story. When the Conference of 1864 met, Moynier again dominated it; indeed, for fifty years he was the President. Dunant, the once brilliant business man, was under a cloud, for he had followed his dream too thoroughly. The Algerian affairs had gone from bad to worse, and soon all his financial doings slipped down into disruption. Bankrupt, ill, friendless, and on the verge of that persecution mania which ultimately beset him, Henri Dunant was quietly dropped by the great organiza-

tion at Geneva. He tried to exist on the strength of the literary reputation from the Souvenir, but nothing came of it. Nobody wanted or heeded him, and he disappeared. Only the Red Cross went on from strength to strength.

Fifteen years later, in the little alpine village of Heiden. he reappeared, an eccentric elderly man, with a long white beard which went nearly to his knees. It was the young village schoolmaster, Wilhelm Sonderegger, who recognized in the stranger the founder of the Red Cross, and he and his wife befriended the old man, and brought him back for a time to something like his old enthusiastic self. The International Conference was to be held in Rome, and Dunant urged Sonderegger to attend. But the scheme came to nothing, for there was no money for the journey, and although Dunant tried to raise a tiny fund there was never enough. The man who had canvassed the courts of Europe was unable to raise a few hundred francs. Sonderegger, prevented from going to Rome, secretly wrote a letter to the Conference, telling them of Dunant's presence in his village. That letter from the village schoolmaster was the sensation of the occasion. Great people bestirred themselves to try to give the old man his rightful place in this vast organization which he had started. Some came to Heiden to see him. The newly established Nobel Peace Prize was first given to him in company with another. But it was really all too late. His mind, wounded by that world for which he had done so much, was unable to respond. Even with Wilhelm Sonderegger he found a grievance; and, although the last eighteen years were spent in comparative comfort in the little hospital at Heiden, Dunant never recovered the years of neglect. He died in 1910.

"I desire to be carried to the grave without any of your ceremonics which I do not acknowledge," he had

said to Sonderegger. "I rely upon your friendship that it shall be done thus with me. I am a disciple of Christ like those of the first century, that is all."

Today more than ever, we realize the tremendous service he did for the world. The wounded, prisoners of war, civilians, refugees, internees—as the effects of war become more universal the work of the Red Cross expands to meet it. Always the organization at Geneva has managed to keep its allegiance to its own work of mercy above all national and partisan suspicions, so that it goes from strength to strength, unhampered, trusted, acting still on the belief which moved Henri Dunant and his improvised little band on the field of Solferino: "We are all brothers."

HORACE SHIPP

3 11 D

A STRANGE STORY

In the northern part of Austin there once dwelt an honest family by the name of Smothers. The family consisted of John Smothers, his wife, himself, their little daughter, five years of age, and her parents, making six people toward the population of the city when counted for a special write-up, but only three by actual count.

One night after supper the little girl was seized with a severe colic, and John Smothers hurried down town to get

some medicine.

He never eame back.

The little girl recovered and in time grew up to woman-hood.

The mother grieved very much over her husband's disappearance, and it was nearly three months before she married again and moved to San Antonio.

The little girl also married in time, and after a few years had rolled around, she also had a little girl five years of age.

She still lived in the same house where they dwelt when her father had left home and never returned.

One night by a remarkable coincidence her little girl was taken with cramp colic on the anniversary of the disappearance of John Smothers, who would now have been her grandfather if he had been alive and had a steady job.

"I will go down town and get some medicine for her," said John Smith (for it was none other than he whom

she had married).

3

"No, no, dear John," cried his wife. "You, too, might disappear for ever, and then forget to come back."

So John Smith did not go, and together they sat by the

bedside of little Pansy (for that was Pansy's name).

After a little, Pansy seemed to grow worse, and John Smith again attempted to go for medicine, but his wife would not let him.

Suddenly the door opened, and an old man, stooped and bent, with long white hair, entered the room.

"Hello, here is grandpa," said Pansy. She had recog-

nized him before any of the others.

The old man drew a bottle of medicine from his pocket and gave Pansy a spoonful.

She got well immediately.

"I was a little late," said John Smothers, "as I waited for a street car."

O. HENRY

FERDINAND DE LESSEPS

For centuries the people of Europe searched for an easy route to India and the Far East. Once the only route was by caravan across the steppes and mountains of Asia, a perilous journey that few undertook and few survived. Then in 1496 Vasco da Gama discovered the sea route round the Cape of Good Hope, and for the next three centuries the traders and soldiers of Portugal and France, Holland and England followed him. How often weary travellers must have longed for a shorter and less stormy journey!

If only a canal could be cut linking the Mediterranean Sea to the Red Sea, it would shorten the voyage to India by three thousand miles, it would save weeks of sailing, and the stormy passage round the Cape of Good Hope would be avoided. The idea must have come to many a sailor, only to be rejected as a foolish dream. Yet it was no mere dream. In the days of the Pharaohs the Egyptians had attempted to build a canal from the Nile to the Red Sea, and the Roman Emperor Trajan, in A.D. 108, actually completed a canal from Memphis on the Nile to the Red Sea. This was later abandoned because the low tides on the Nile in springtime made the canal unsafe.

Centuries later, Napoleon sent an engineer to study the problem of building a canal across the Isthmus of Suez. He was told that the work would take ten thousand workmen four years to finish and would cost a million and a half pounds. Even for Napoleon this was too vast an undertaking, and he left the problem for others.

Half a century later the project that had discouragedrulers and engineers for centuries was successfully carried out by a French diplomat named Ferdinand de Lesseps. Though he had no training as an engineer and no money or men to help him, de Lesseps set to work in 1854 and in the face of bitter opposition completed the work in fifteen years.

Ferdinand de Lesseps was born on 19th November, 805, the year of Nelson's victory at Trafalgar. The family of de Lesseps had an ancient and honourable record in the diplomatic service of France. Ferdinand's father, Mathieu de Lesseps, served his country as consul or agent in many countries, including Egypt, Russia, Morocco, Tunis and the United States.

While Mathieu de Lesseps was consul in Egypt, which was then under Turkish rule, it was his task as Napoleon's agent to bring Egypt to the side of France, for the Turks had sided with the British. He secretly helped an Albanian colonel named Mohammed Ali to seize Cairo. Though Mohammed Ali proclaimed himself Pasha (or Viceroy) of Egypt in the name of the Sultan of Turkey, it was without his consent. The Sultan was too weak to turn out the new Pasha, who now looked to France as friend and ally. England did not soon forget the success of Mathieu de Lesseps' schemes against her in Egypt, and when his son proposed the Sucz Canal it was England who was most bitterly opposed to the whole idea.

Like his father, Ferdinand de Lesseps went into the French Diplomatic Service. His first appointment was as vice-consul at Lisbon, where his uncle was consul. A few years later he was sent to Tunis where his father was consul-general. He showed such ability in these posts that in 1832 he was sent as vice-consul to Alexandria.

Mohammed Ali was still reigning in Egypt with great success. His armies had conquered Syria, and under his rule Egypt was almost as prosperous as in ancient times. Ferdinand de Lesseps was given a hearty welcome by the Pasha. "It is your father who made me what I am," he declared when they met. "Remember, you can trust me at all times."

While his ship was held in quarantine outside the port of Alexandria, de Lesseps passed the time reading a book written by Napoleon's engineer Lepère on the problem of a canal between the two seas, the Mediterranean and the Red Sea. Many years were to pass before he could earry out his ambition, but reading Lepère's book first gave de Lesseps the idea of the Suez Canal.

While in Egypt de Lesseps won the friendship of Mohammed Ali's son, Prince Said. This young man was a source of worry to his father because he was too fat. De Lesseps took Prince Said in hand and helped him to slim by horse-riding and severe physical training. The Prince never forgot the help given him by the French consul.

Throughout his career as a consul of France, de Lesseps won praise and admiration everywhere, not only as a clever diplomat but also as a staunch champion of peace and friendship with all nations. Wherever he went those in need or distress could always rely on help from the French consul.

Soon after his arrival in Alexandria an epidemic of plague broke out in Egypt and lasted for two years. The number of victims was enormous, and de Lesseps worked tirelessly to help them. He turned his consulate into a hospital and organized supplies of clean clothing and drugs for the sufferers. When doctors were afraid to attend to a batch of victims in one hospital de Lesseps himself went to nurse them.

Some years later de Lesseps was consul-general at Barcelona during a bitter and terrible. Civil War. The city suffered heavy bombardment and the French Consulate was often hit. Yet de Lesseps calmly continued giving aid and shelter not only to French subjects, but to homeless Spanish women and children. Afterwards he was publicly thanked by the Bishop of Barcelona on behalf of the city and the French Government made him an Officer of the Legion of Honour. Wherever he went, it was said, people exclaimed, "The Consul of France!" and made room, as for a great personage.

De Lessep's name was held in such high honour in France that he was entrusted with many a mission of great importance and difficulty. After the French Revolution of 1848, he was made Ambassador to Spain, where he did much to win Spanish friendship for the new Government of France. When he left, Queen Isabella told him: "You carry away with you my esteem and that

of all my subjects."

It seemed as if no post of honour could be too high for de Lesseps when suddenly in 1849 his government asked him to go as special envoy to Rome. His mission was a difficult and dangerous one. In Rome a republic had been declared and the Pope had fled. But the greater part of Italy was under the rule of Austrians who determined to destroy the new republic. The French Government at once sent an army to Rome, not because it liked the republicans but because it hated the Austrians. At the approach of the French army all Rome rose in arms to oppose it. It was at this moment that de Lesseps was sent to Rome. His task was to urge the citizens to accept the protection of the French army, but he was never told that his Government intended to restore the Pope and turn out the republicans. The people of Rome did not trust the French, and de Lesseps' mission was a failure. He was recalled in disgrace and retired into private life, a very disappointed man.

Even greater misfortune now befell de Lesseps. His wife and one of his sons fell ill and died of scarlet fever.

In order to forget his grief, de Lesseps busied himself with rebuilding his old Manor House at Chesnaye. But his life had grown sad and no longer full of the great hopes he once cherished.

One day, while he was busy with his masons and carpenters, the postman arrived with letters from Paris. One of them brought news from Egypt. A new Pasha had come to the throne—none other than his old friend Mohammed Said. De Lesseps was at once filled with fresh hope. Here, at last, was the golden opportunity for him to start work on his cherished ambition—the Suez Canal.

Without delay he set out for Egypt to pay his respects to the new Pasha on his investiture, the ceremony by which he officially became Pasha. He was received in state and given a hearty welcome by Mohammed Said. The two friends travelled together from Alexandria to Cairo for the investiture. On the way de Lesseps explained to Mohammed Said his plans for the Suez Canal. The new ruler listened carefully, and at last said: "I am convinced; I accept your plan; we will concern ourselves during the rest of our expedition as to the means of carrying it out. You may regard the matter as settled, and trust me."

Next day the Viceroy called together his advisers and the consuls of foreign states, and told them of his intention to open up the Isthmus of Suez by means of a canal.

Nor did de Lesseps waste time. In company with the engineers he had chosen to carry out the great work he set out for Suez. Very soon he had drawn up a report of the work to be done, and all seemed ready to start.

But there was one more obstacle. Before work could begin, the Viceroy had to obtain the consent of his overlord, the Sultan of Turkey. It was a very bad time to seek such consent. The Crimean War was then at its height, and there was no doubt at all that the Sultan would not consent if his English allies opposed the canal. English statesmen had not forgotten Napoleon's schemes in Egypt. There was another Napoleon on the throne of France, and now another de Lesseps was scheming in Cairo and Alexandria. Small wonder they were suspicious. What did they care about a shorter route to India if Frenchmen could cut it in Egypt?

So when de Lesseps hurried to Istanbul the Sultan refused to make up his mind about the proposed eanal. Undismayed, de Lesseps hurried across Europe to London, where he determined to seek the consent of the British Prime Minister himself. Again he was refused. Lord Palmerston, the Prime Minister, was polite, but that was all. The whole scheme, he suggested, was a childish dream.

De Lesseps refused to be dismayed. He toured England explaining his plans, for he was sure that shipowners and traders would welcome a shorter route to the Far East. "I have come to England to place the matter clearly before the eyes of the public," he declared. Month after month he lectured to bankers, shipowners, traders, engineers, Members of Parliament and other public men. He was even presented to Queen Victoria and the Prince Consort. At first his plan was laughed at, but soon English people began to see its good points and were completely won over.

At last only the British Government opposed him. Even they began to think differently when the Indian Mutiny broke out in 1857 and troops had to be sent hurriedly overland to India by way of Suez, because the voyage round the Cape of Good Hope would take too long.

Nearly five years after de Lesseps first told Mohammed Said of his plan, the actual work of building the Suez Canal was begun. On 25th April, 1859, de Lesseps himself struck the first blow with a pickaxe and shovelled the first spadeful of sand on the site of the northern end of the

canal on the shores of the Mediterranean. Here later was founded the town of Port Said, named in honour of Mohammed Said.

The British Government was still strongly opposed to de Lesseps' work, but he decided to carry on without its support. Digging went on day after day, month after month, until on 18th November, 1862, the canal reached Lake Timsah, nearly half-way to the Red Sea. To celebrate this progress, a picturesque ceremony took place on the shores of the lake. As the canal waters burst through into the lake, de Lesseps proclaimed to a vast crowd of guests and sightseers: "In the name of his Highness, Mohammed Said, I command that the waters of the Mediterranean enter Lake Timsah by the grace of God!"

Dc Lesscps was now triumphant. Even the Sultan of Turkcy and the British Government recognized that the canal was not a madman's dream nor a danger to peace. But in the midst of messages of goodwill news came to de Lesseps that Mohammed Said was dying. At once he mounted his horse and galloped away by night across the desert to see his friend before he died. He was too late, however, for the Viceroy was dead before de Lesseps could reach Alexandria, where he mourned the Prince in the family mosque. The new Viceroy assured de Lesseps that he would support him. If he did not, he added, "I would not be worthy to be Viceroy of Egypt."

The Suez Canal was opened on 17th November, 1869, amid great ceremony. Thousands of distinguished men and women came from all over the world. Port Said was filled with the warships, steamers and yachts of all nations. The French Imperial yacht, the Aigle, with the Empress Eugénic on board, was the first to move, amid gunfire and cheers, into the canal from the Mediterranean. At the same time a fleet of Egyptian warships entered the canal from the Red Sea, When the two fleets met at

sunset, the cheers were deafening, but de Lesseps, the hero of it all, was fast asleep, worn out with his labours and anxieties.

Honours and decorations now poured on de Lesseps from all parts of the world. Even the British Government relented, and the Queen bestowed on him the Grand Cross of the Order of the Star of India, whilst the City of London granted him the freedom of the city.

Five years after the canal was opened, the Viceroy of Egypt was forced to sell his shares in the Canal Company in order to avoid bankruptcy. Rather than let the control of the Suez Canal fall into other hands, the British Prime Minister at that time, Benjamin Disraeli, promptly decided to purchase these shares on behalf of the British Government.

De Lesseps had always wanted the Canal to be used for the benefit of all. He did not want to see one nation in a position to open and close it at will. Although owned by a private company, the Canal is open to ships of all nations, but certain dues have to be paid.

Though de Lesseps was now an old man, he cherished another ambition which he did not live to see fulfilled. The success of the Suez Canal led many to believe that a canal could be cut across the Isthmus of Panama. De Lesseps determined to be the man to carry out this project.

His friends tried to warn him against so great an undertaking, and urged him to rest content with what he had done. Their words were unheeded. "The canal will be made," was the old man's reply to every protest.

After a tour of the Panama Canal route at the best time of the year, de Lesseps set his men to work in 1881. At first all went well and good progress was made. Then disaster after disaster wrecked his plans. In 1882 a severe earthquake and a tidal wave stopped all work for a long time, and every year violent tropical rainfall flooded the excava-

tions and ruined much of the machinery. Large numbers of the workmen died yearly of yellow fever, typhus and dysentery. As years passed and little progress was made, costs mounted higher and higher. The de Lesseps company was bankrupt, and he and his son Charles were arrested and put on trial for defrauding the public.

Ferdinand de Lesseps was by this time too old to know anything of these disasters. His days were now spent seated by his fire at Chesnaye, dreaming of past glories. He knew nothing of his trial and acquittal, nor did he live to see the final success of his plans when the Americans finished the Panama Canal in 1914.

At Port Said in sight of all ships entering and leaving the Suez Canal stands the statue of Ferdinand de Lesseps, the man who made easy the voyage to the East.

J. WALTON

THE CONJURER'S REVENGE

"Now, ladies and gentlemen," said the conjurer, "having shown you that the cloth is absolutely empty, I will proeced to take from it a bowl of goldfish. Presto!"

All around the hall people were saying, "Oh, how

wonderful! How does he do it?"

But the Quick Man on the front seat said in a big whisper to the people near him, "He-had-it-up-his -sleeve."

Then the people nodded brightly at the Quick Man and said, "Oh, of course"; and everybody whispered round the hall, "He—had—it—up—his—sleeve."

"My next trick," said the conjuror, "is the famous Hindostanee rings. You will notice that the rings are apparently separate; at a blow they all join (clang, clang, clang)-Presto!"

There was a general buzz of stupefaction till the Quick Man was heard to whisper, "He—must—have—had—another—lot—up—his—sleeve."

Again everybody nodded and whispered, "Therings-were-up-his-sleeve."

The brow of the conjurer was clouded with a gathering

frown.

"I will now," he continued, "show you a most amusing trick by which I am enabled to take any number of eggs from a hat. Will some gentleman kindly lend me his hat? Ah, thank you-Presto!"

He extracted seventeen eggs, and for thirty-five seconds , the audience began to think that he was wonderful. Then the Quick Man whispered along the front bench, "He—has—a—hen—up—his—sleeve," and all the people whispered it on. "He—has—a—lot—of—hens—up—his—sleeve."

The egg trick was ruined.

It went on like that all through. It transpired from the whispers of the Quick Man that the conjurer must have concealed up his sleeve in addition to the rings, hens, and fish, several packs of cards, a loaf of bread, a doll's cradle, a live guinea-pig, a fifty-cent piece, and a rocking-chair.

The reputation of the conjurer was rapidly sinking below zero. At the close of the evening he rallied for a final effort.

"Ladies and gentlemen," he said, "I will present to you, in conclusion, the famous Japanese trick recently invented by the natives of Tipperary. Will you, sir," he continued, turning towards the Quick Man, "will you kindly hand me your gold watch?"

It was passed to him.

"Have I your permission to put it into this mortar and pound it to pieces?" he asked savagely.

The Quick Man nodded and smiled.

The conjurcr threw the watch into the mortar and grasped a sledge-hammer from the table. There was a sound of violent smashing, "He's—slipped—it—up—his—sleeve," whispered the Quick Man.

"Now, sir," continued the conjurer, "will you allow me to take your handkerchief and punch holes in it? Thank you. You see, ladies and gentlemen, there is no deception; the holes are visible to the eye."

The face of the Quick Man beamed. This time the real

mystcry of the thing fascinated him.

"And now, sir, will you kindly pass me your silk hat and allow me to dance on it? Thank you."

The conjurer made a few rapid passes with his feet and

exhibited the hat, crushed beyond recognition.

"And will you now, sir, take off your celluloid collar and permit me to burn it in the candle? Thank you, sir. And will you allow me to smash your spectacles for you with my hammer? Thank you."

By this time the features of the Quick Man were assuming a puzzled expression. "This thing beats me," he

whispered, "I don't see through it a bit."

There was a great hush upon the audience. Then the conjurer drew himself up to his full height and, with a

withering look at the Quick Man, he concluded:

"Ladies and gentlemen, you will observe that I have, with this gentleman's permission, broken his watch, burnt his collar, smashed his spectacles, and danced on his hat. If he will give me the further permission to paint green stripes on his overcoat, or to tie his suspenders in a knot, I shall be delighted to entertain you. If not, the performance is at an end."

And amid a glorious burst of music from the orchestra the curtain fell, and the audience dispersed, convinced that there are some tricks, at any rate, that are not done up the conjurer's sleeve.

STEPHEN LEACOCK

a 14 »

DEER SHOOTING

WHEN I was a young man my father once sent me on a holiday to the Shetland Isles, where I stayed with a doctor.

"You'll like him," my father had said. "He's rather harum-scarum, and a little careless. Don't take any presents from him; he's a man who'll offer you everything he's got."

I found that the doctor was a happy, boyish dark-haired man of about thirty, married to a serious, orderly, middle-aged woman, whose wisdom and prudence were in contrast with her husband's freedom from care. There were no ehildren. Their house faced the sea, and there was no other dwelling within sight. They had one other guest, a young tweed manufacturer from Jedburgh, and on rainy days the three of us played cards until the doctor's wife, on finding us sitting down to cards after breakfast, removed both packs and declined to produce them until the evening.

One morning the doctor woke me at seven. "Would you like to shoot a deer?" In a second I was out of bed. "You can see it from the window. Yes, in the middle of that third field. It's a hind, and you'll have to stalk her. No, I shouldn't dress. The grass is wet, so put on a pair of shoes. You'll be going down wind, so you'll have to creep all the way. I've got the rifle loaded downstairs."

I went down in pyjamas, and in the hall he handed me the Martini-Henry rifle. The tweed manufacturer, like the doctor, was up and dressed, and I thought it very kind of them to let me have the shot-but they knew I was

a good rifle shot.

It was a long stalk across two fields of hay. I moved on both knees and one hand, holding the heavy rifle in the other. The hay was wet and full of thistles, and the ground was stony. I had to wriggle through a hedge, was scratched by brambles and stung by nettles. These discomforts were of no account, provided the deer was not alarmed. After twenty minutes' erawling I reached the hedge of the field in which the deer was grazing. She was within eighty yards and by good fortune was standing broadside on. It was an easy shot. I raised the rifle, aimed for below her left shoulder, and pressed the trigger. There was a click. A misfire. The hind pricked her cars, stopped grazing, and looked in my direction. Marvellous hearing these animals have! And what good stalking on my part that she did not know I was there! It was the first time I had stalked a deer. She must be a greedy brute! Otherwise why should she come down from the hills and so near a house in summer, when there was plenty of food in the wilds. Very quietly I opened the breech. There was no cartridge in the rifle. Just like the doctor to forget to load it. Careless fellow! But the deer was undisturbed and I could ereep back to the house for a cartridge. If I went as carefully as I had come the deer would stay where she was.

Back I crawled through the fields of soaking hay, and did not rise to my feet until within twenty yards of the house. As soon as I stood up the doctor and his friend rushed out shouting with insensate laughter. I was very

"It was your fault, you forgot the cartridge!"
"Forgot the cartridge!" shouted the doctor, behaving like a lunatic. "The cartridge! Do you think I should let you shoot my tame deer?"

"A good thing for you and your deer that I hadn't a cartridge in my pocket."

"A cartridge in your pocket! That's why we sent you

off in pyjamas."

"Yes," shricked the tweed merchant, "and his pyjamas are torn."

"And all he needed," spluttered the doctor, "was a

lump of sugar!"

"You're a couple of fools," I shouted. Strange how mistaken we can be in our fellow-men. Up to this time I had liked both of them, but now I realized that each had a streak of low vulgarity!

But the more I cursed the more they laughed. The two of them shouted, rocked, and bent themselves with laugh-

ter, until the doctor's wife appeared.

"Have you all taken leave of your senses? And on a Sabbath morning too! There are servants in this house whose feelings shall be respected, and" (pointing at me, who, with my rifle must have looked like an early edition of Robinson Crusoe) "what is he doing going about in this state? Disgraceful, I call it. Go to your room, sir, and clothe yourself."

On reaching my room, I remembered that I was not on the mainland of Scotland, and that there were no wild deer in the Shetlands. Yes, it was an excellent jest. But curse those brambles, nettles and thistles which had

left their marks.

HALLIDAY SUTHERLAND

2 15 E

A VISIT TO THE MOON

LET us charter a rocket to take us to the moon, so that we

can actually walk on its surface.

Our rocket must be shot off at a high speed—6.93 miles a second at least—for if it starts at any lesser speed it will merely fall back to earth, like the shot from an ordinary gun. If it starts with a speed of exactly 6.93 miles a second, it will just get clear of the earth's gravitational pull, but after it has got clear, it will have no appreciable speed left to carry us on our journey. Let us start with a speed of 7 miles a second, then it will still have a speed of 1 mile a second left after it has got clear of the earth's pull, and we shall reach the moon in a little over two days.

We only take a few seconds to pass through the earth's atmosphere, which is relatively hardly thicker than the thin skin of a plum or a peach. As we pass through this, we gradually leave beneath us all the particles of air, dust, water vapour and so on, which scatter the sun's light and make the sky look blue. As the number of these particles decreases we see the sky assuming in turn the coloursblue, dark blue, dark violet and black-grey. Finally we leave the earth's atmosphere beneath us and see the sky become jet black, except for the sun, moon and stars. These look brighter than they did from the earth, and also bluer because none of the blue light has been subtracted from them to make a blue sky. And the stars no longer twinkle at us as they did on earth because there is no atmosphere to disturb the even flow of their light. They seem now to stab our eyes with sharp steely needles of light. If we look back at our earth, we shall see about half of its surface shrouded in mists, clouds and showers. But in front, the whole surface of the moon shines out perfectly clear; it has no atmosphere to scatter the sun's light, and no fogs and rains to obscure the illumination of its surface.

Naturally this clearness persists after we have arrived on the moon's surface, and far exceeds anything we have ever experienced on earth. Our atmosphere is the eause of the soft tones that add so much to a terrestrial landscape -the oranges and reds of sunrise and sunset, the purples and greens of twilight, the blue sky of full day, the purple haze of the distance. Here on the moon there is no atmosphere to break up the sun's rays into their different colours and distribute them-the blue to the sky, the red to the dawn, and so on. There are only two colourssunshine and shadow, white and black: everything in the sunshine is white, everything else is black. We feel as though we were in a cinema studio lighted only by one terribly powerful light—the sun. A valley stays utterly dark until the moment when the sun rises over the surrounding mountains; then full day comes, with all the suddenness of turning on an electric light.

It is clear that if we want to step out of our rocket and walk about on the moon, we must bring our own air with us; we shall need an oxygen apparatus, such as the climbers on Mount Everest had. We may perhaps think that the weight of this will make walking or climbing very arduous, but as soon as we set foot on the soil of the moon, we shall find that the contrary is the case. The moon contains less than an eightieth part of the substance of the earth, and so exerts a gravitational pull which is much smaller than the earth's—in fact it is only about a sixth as great. For this reason, we find we can earry extraordinary weights without fatigue, and as our bodies seem to weigh almost nothing, we can jump to great heights. We feel

so athletic that we may even try to break our own jumping records. It ought not to be difficult to break both our own and everybody else's; a good high jumper ought to jump about thirty-six feet, and the long jump of a fair athlete ought to be at least 120 feet. If we feel inspired to play cricket, the ball will simply soar off our bat, so that if it is not to be entirely a batsman's game, the pitch and field must each be six times the size they are on earth. Unfortunately, all this will make the game six times as slow as on earth, and perhaps cricket, played six times as slowly as on earth, would not be much of a game after all.

If we fire a gun, our shot will travel a terrific distance before falling back to earth—or rather to moon. We remember the big guns which fired shells nearly eighty miles in the Great War; if similar guns were mounted on the moon, their projectiles would go right off into space and never return. We shall not want to start setting big guns up on the moon, but we can produce the same effect with something much simpler—a breath of air from our

breathing apparatus.

For we know that ordinary air consists of tiny particles, called molecules, which are incessantly jumping about—some quite slowly, the majority at about the speed of a rifle bullet, and a few at far higher speeds. Some move faster than any projectile which has ever been fired from a gun.

We had to start our rocket from earth with a speed of about 7 miles a second, in order that it might overcome the earth's gravitational pull; with any lower speed it would have merely fallen back to earth like a cricket ball. And a projectile of any other kind needs precisely the same speed if it is to get clear of the earth. Now it is only at very rare intervals that molecules of air attain a speed of 7

into space—this is why the earth retains its atmosphere. On the other hand, a projectile only needs a speed

of $1\frac{1}{2}$ miles a second to jump entirely clear of the moon, and molecules of ordinary air frequently attain speeds as high as this. We see at once that an atmosphere of air could not survive on the moon for long, since each molecule would jump off into space the moment it attained this critical speed of $1\frac{1}{2}$ miles a second.

Just because there is no atmosphere on the moon there can be no seas, rivers or water of any kind. We are accustomed to think of water as a liquid which does not boil away until it reaches a temperature of 212 degrees, but if ever we picnie high up on a mountain, we find out our mistake; we soon discover that water boils more easily and at a lower temperature there than on the plain below. The reason is that there is less weight of air to keep the molecules of the liquid pressed down, and so prevent them flying off by evaporation. If there were no air-pressure at all, the water would evaporate, no matter how low its temperature, and this is precisely what would happen on the moon. Clearly then we shall find no water on the moon; we must take drinking water with us, and it will not be well to pour it out and leave it standing; if we do it will have disappeared by the time we want to drink itits molecules will have danced off, one by one, into space.

Knowing that there is neither air nor water on the moon, we shall hardly expect to find men or animals, trees or flowers. And in actual fact, the moon has been observed night after night and year after year for centuries, and no one has ever found any trace of forests, vegetation or life of any kind. No changes are detected beyond the alternations of light and of dark, of heat and of cold, as the sun rises and sets over the arid landscapes. The moon is a dead world—just a vast reflector poised in space, like a great mirror reflecting the sun's beams down on to us.

= 16 =

THE MONSTER WASPS

The Food of the Gods was discovered by two scientists, Mr. Bensington and Professor Redwood. They intended to experiment by feeding fowls on it. But Mr. and Mrs. Skinner, whom they put in charge of the experimental poultry farm, were careless persons, and they allowed wasps to help themselves to the food. The results, as you will see when you read the following story, were alarming.

Ir was a keeper named Godfrey on the estate of Lieutenant-Colonel Rupert Hick, near Maidstone, who encountered and had the luck to kill the first of these monsters of whom history has any record. He was walking knee high in bracken across an open space in the beechwoods that diversify Lieutenant-Colonel Hick's park, and he was carrying his gun-very fortunately for him a double-barrelled gun-over his shoulder, when he first caught sight of the thing. It was, he says, coming down against the light, so that he could not see it very distinctly, and as it came it made a drone "like a motor-car." He admits he was frightened. It was evidently as big or bigger than a barn owl, and, to his practised eye, its flight and particularly the misty whirl of its wings must have seemed weirdly unbirdlike. The instinct of self-defence, I fancy, mingled with long habit, when, as he says, he "let fly, right away."

The queerness of the experience probably affected his aim; at any rate most of his shot missed, and the thing merely dropped for a moment with an angry "Wuzzzz" that revealed the wasp at once, and then rose again, with

all its stripes shining against the light. He says it turned on him. At any rate, he fired his second barrel at less than twenty yards and threw down his gun, ran a pace or so, and ducked to avoid it.

It flew, he is convinced, within a yard of him, struck the ground, rose again, came down again perhaps thirty yards away, and rolled over with its body wriggling and its sting stabbing out and back in its last agony. He emptied both barrels into it again before he ventured to go near.

When he came to measure the thing, he found it was twenty-seven and a half inches across its open wings, and its sting was three inches long. The abdomen was blown clean off from its body, but he estimated the length of the creature from head to sting as eighteen inches—which is very nearly correct. Its compound eyes were the

size of penny pieces.

That is the first authenticated appearance of these giant wasps. The day after, a cyclist riding, feet up, down the hill between Sevenoaks and Tonbridge, very narrowly missed running over a second of these giants that was crawling across the roadway. His passage seemed to alarm it, and it rose with a noise like a saw-mill. His bicycle jumped the footpath in the emotion of the moment, and when he could look back, the wasp was soaring away above the woods towards Westerham.

After riding unsteadily for a little time, he put on his brake, dismounted—he was trembling so violently that he fell over his machine in doing so—and sat down by the roadside to recover. He had intended to ride to Ashford, but he did not get beyond Tonbridge that day....

After that, curiously enough, there is no record of any big wasps being seen for three days. I find on consulting the meteorological record of those days that they were overcast and chilly with local showers, which may perhaps account for this intermission. Then on the fourth day came blue sky and brilliant sunshine, and such an outburst of wasps as the world had surely never seen before.

How many big wasps came out that day it is impossible to guess. There are at least fifty accounts of their apparition. There was one victim, a grocer, who discovered one of these monsters in a sugar-cask and very rashly attacked it with a spade as it rose. He struck it to the ground for a moment, and it stung him through the boot as he struck at it again and cut its body in half. He was first dead of the two. . . .

The most dramatic of the fifty appearances was certainly that of the wasp that visited the British Museum about midday, dropping out of the blue serene upon one of the innumerable pigeons that feed in the courtyard of that building, and flying up to the cornice to devour its vietim at leisure. After that it crawled for a time over the Museum roof, entered the dome of the reading-room by a skylight, buzzed about inside it for some little time—there was a stampede among the readers—and at last found another window and vanished again with a sudden silence from human observation.

Most of the other reports were of mere passings or descents. A picnie party was dispersed at Aldington Knoll, and all its sweets and jam consumed, and a puppy was killed and torn to pieces near Whitstable under the very eyes of its mistress. . . .

The streets that evening resounded with the cry, the newspaper placards gave themselves up exclusively in the biggest of letters to the "Gigantic Wasps in Kent." Agi-

editors and assistant editors ran up and down rtuous staircases bawling things about "wasps". And rosessor Redwood, emerging from his college in Bond street at five, flushed from a heated discussion with his

committee about the price of bull-calves, bought an evening paper, opened it, changed colour, forgot about bull-calves and committee forthwith, and took a hansom headlong for Bensington's flat.

H. G. WELLS

THE PURPLE JAR

ROSAMOND, a little girl about seven years old, was walking with her mother in the streets of London. As she passed along she looked in at the windows of several shops, and saw a great variety of different sorts of things, of which she did not know the use, or even the names. She wished to stop to look at them, but there was a great number of people in the streets, and a great many carts, carriages and wheelbarrows, and she was afraid to let go her mother's hand.

"Oh, mother, how happy I should be," she said, as she passed a toy-shop, "if I had all these pretty things!"

"What, all! Do you wish for them all, Rosamond?"

"Yes, mamma, all."

As she spoke they came to a milliner's shop, the windows of which were decorated with ribands and lace, and festoons of artificial flowers.

"Oh, mamma, what beautiful roses! Won't you buy

some of them?"

"No, my dear."

"Why?"

"Because I don't want them, my dear."

They went a little further, and came to another shop, which caught Rosamond's eye. It was a jeweller's shop, d in it were a great many pretty baubles, ranged in

d in it were a great many pretty baubles, ranged in awers behind glass.

"Mamma, will you buy some of these?"

"Which of them, Rosamond?"

"Which? I don't know which; any of them will do, for they are all pretty."

"Yes, they are all pretty, but of what use would they

be to me?"

"Use? Oh, I am sure you could find some use or other for them if you would only buy them first."

"But I would rather find out the use first."

"Well, then, mamma, there are buckles; you know that buckles are useful things, very useful things."

"I have a pair of buckles; I don't want another pair,"

said her mother, and walked on.

Rosamond was very sorry that her mother wanted nothing. Presently, however, they came to a shop which appeared to her far more beautiful than the rest. It was a chemist's shop, but she did not know that.

"Oh, mother, oh!" cried she, pulling her mother's hand; "look, look! blue, green, red, yellow, and purple! Oh, mamma, what beautiful things! Won't you buy some of these?"

Still her mother answered as before, "Of what use

would they be to me, Rosamond?"

"You might put flowers in them, mamma, and they would look so pretty on the chimney-piece. I wish I had one of them."

"You have a flower-pot," said her mother, "and that

is not a flower-pot."

"But I would use it for a flower-pot, mamma, you know."

"Perhaps if you were to see it nearer, if you were to

examine it, you might be disappointed."

"No, indeed, I'm sure I should not; I should like it exceedingly."

Rosamond kept her head turned to look at the purple

vase till she could see it no longer.

"Then, mother," said she, after a pause, "perhaps you have no money,"

"Yes, I have."

"Dear me, if I had money I would buy roses and boxes and buckles and purple flower-pots and everything." Rosamond was obliged to pause in the middle of her speech.

"Oh, mamma, would you stop a minute for me? I have

got a stone in my shoe; it hurts me very much."

"How came there to be a stone in your shoe?"

"Because of this great hole, mamma—it comes in there; my shoes are quite worn out. I wish you would be so very good as to give me another pair."

"Nay, Rosamond, but I have not money enough to buy shoes and flower-pots and buckles and boxes and every-

thing."

Rosamond thought that was a great pity. But now her foot, which had been hurt by the stone, began to give her so much pain that she was obliged to hop every other step, and she could think of nothing else. They came to a shoemaker's shop soon afterwards.

"There, there! Mamma, there are shoes; there are little shoes that would just fit me, and you know shoes

would be really of use to me."

"Yes, so they would, Rosamond. Come in."

She followed her mother into the shop.

Mr. Sole, the shoemaker, had a great many customers, and his shop was full, so they were obliged to wait.

"Well, Rosamond," said her mother, "you don't think

this shop so pretty as the rest?"

"No, not nearly; it is black and dark, and there are nothing but shocs all round; and, besides, there's a very disagreeable smell."

"That smell is the smell of new leather."

"Is it? Oh!" said Rosamond, looking round, "there is a pair of little shoes; they'll just fit me, I'm sure."

"Perhaps they might; but you cannot be sure till you

have tried them on, any more than you be quite sure that you would like the purple vase exceedingly, till you have examined it more attentively."

"Why, I don't know about the shoes, certainly, till I have tried, but, mamma, I am quite sure that I should

like the flower-pot."

"Well, which would you rather have, a jar or a pair of shoes? I will buy either for you."

"Dear mamma, thank you—but if you could buy both?"

"No, not both."

"Then the jar, if you please."

"But I should tell you, that in that case I shall not give

you another pair of shoes this month."

"This month! That's a very long time indeed! You can't think how these hurt me; I believe I'd better have the new shoes. Yet, that purple flower-pot. Oh, indeed, mamma, these shoes are not so very, very bad! I think I might wear them a little longer, and the month will soon be over. I can make them last till the end of the month, can't I? Don't you think so, mamma?"

"Nay, my dear, I want you to think for yourself; you will have time enough to consider the matter whilst I

speak to Mr. Sole about my clogs."

Mr. Sole was by this time at leisure, and whilst her mother was speaking to him, Rosamond stood in profound meditation, with one shoe on and the other in her hand.

"Well, my dear, have you decided?"

"Mamma!—yes—I believe I have. If you please, I should like to have the flower-pot; that is, if you won't

think me very silly, mamma."

"Why, as to that I can't promise you, Rosamond; but, when you have to judge for yourself, you should choose what would make you happy, and then it would not signify who thought you silly."

"Then, mamma, if that's all, I'm sure the flower-pot would make me happy," said she, putting on her old shoe again, "so I choose the flower-pot."

"Very well, you shall have it; clasp your shoe and come home." Rosamond clasped her shoe and ran after her mother. It was not long before the shoe came down at the heel, and many times she was obliged to stop to take the stones out of it, and she often limped with pain! But still the thoughts of the purple flower-pot prevailed, and she persisted in her choice.

When they came to the shop with the large window, Rosamond felt much pleasure upon hearing her mother desire the servant, who was with them, to buy the purple jar and bring it home. He had other commissions, so he did not return with them. Rosamond, as soon as she got in, ran to gather all her own flowers, which she kept in a

corner of her mother's garden.

"I am afraid they'll be dead before the flower-pot comes, Rosamond," said her mother to her, as she came in with the flowers in her lap.

"No, indeed, mamma, it will come home very soon, I daresay. I shall be very happy putting them into the purple flower-pot."

"I hope so, my dear."

The servant was much longer returning home than Rosamond had expected; but at length he came, and brought with him the long-wished-for jar. The moment it was set down upon the table, Rosamond ran up to it with an exclamation of joy; "I may have it now, mamma?"

"Yes, my dear, it is yours."

Rosamond poured the flowers from her lap upon the carpet and seized the purple flower-pot.

"Oh, dear, mother!" cried she, as soon as she had taken off the top, "but there's something dark in it which

smells disagreeably. What is it? I didn't want this black stuff."

"Nor I, my dear."

"But what shall I do with it, mamma?"

"That I cannot tell."

"It will be of no use to me, mamma."

"That I cannot help."

"But I must pour it out and fill the flower-pot with water."

"As you please, my dear. That was more than I prom-

ised you, my dear; but I will lend you a bowl."

The bowl was produced, and Rosamond proceeded to empty the purple vase. But she experienced much surprise and disappointment on finding, when it was entirely empty, that it was no longer a purple vase. It was a plain, white glass jar, which had appeared to have that beautiful colour merely from the liquor with which it had been filled.

Little Rosamond burst into tears.

"Why should you cry, my dear?" said her mother, "it will be of as much use to you now as ever for a flower-pot."

"But it won't look so pretty on the chimney-piece. I am sure, if I had known that it was not really purple, I should not have wished to have it so much."

"But didn't I tell you that you had not examined it;

and that perhaps you would be disappointed?"

"And so I am disappointed indeed. I wish I had believed you at once. Now I had much rather have the shoes, for I shall not be able to walk all this month; even walking home that little way hurt me exceedingly. Mamma, I will give you the flower-pot back again, and that purple stuff and all, if only you'll give me the shoes."

"No, Rosamond; you must abide by your own choice; and now the best thing you can possibly do is to bear your

disappointment with good humour."

"I will bear it as well as I can," said Rosamond, wiping her eyes, and she began clowly and sorrowfully to fill the vase with flowers.

But Rosamond's disappointment did not end here. Many were the difficulties and distresses into which her imprudent choice brought her before the end of the month.

Every day her shoes grew worse and worse, till at last she could neither run, dance, jump, nor wall, in them.

Whenever Rosamond was called to see anything, she was detained pulling her shoes up at the heels, and was sure to be late.

Whenever her mother was going out to walk, she could not take Rosamond with her, for Rosamond had no soles to her shoes; and at length, on the very last day of the month, it happened that her father proposed to take her with her brother to a glass-house, which she had long wished to see. She was very happy; but, when she was quite ready, had her hat and gloves on, and was making haste downstairs to her brother and father, who were waiting for her at the hall door, the shoe dropped off. She put it on again in a great hurry, but, as she was going aeross the hall her father turned round.

"Why are you walking slip-shod? No one must walk slip-shod with me. Why Rosamond," said he, looking at her shoes with disgust. "I thought that you were always

neat; go, I cannot take you with me."

Rosamond coloured and retired.

"Oh, mamma," said she, as she took off her hat, "how I wish that I had chosen the shoes! They would have been of so much more use to me than that jar; wever, I am sure, no, not quite sure, but I hope I shall the wiser another time."

4 18 b

THE REFUGEE

They walked through the new capital, alien and from a far country, yes, although their own lands were only a few hundred miles perhaps from this very street upon which they now walked. But to them it was very far. Their eyes were the eyes of those who have been taken suddenly and by some unaccountable force from the world they have always known and always thought safe until this time. They who had been accustomed only to country roads and fields, walked now along the proud street of the new capital, their feet treading upon the new concrete side-walk, and although the street was full of things they had never seen before, so that there were even automobiles and such things of which they had never even heard, still they looked at nothing, but passed as in a dream, seeing nothing.

There were several hundred of them passing at this moment. If they did not look at anything nor at anyone, neither did any look at them. The city was full of refugees, many thousands of them, fed after a fashion, clothed somehow, sheltered in mats in great camps outside the city wall. At any hour of the day lines of ragged men and women and a few children could be seen making their way towards the camps, and if any city dweller noticed them it was to think with increased bitterness:

"More refugees—will there never be an end to them? We will all starve trying to feed them even a little!"

This bitterness, which is the bitterness of fear, made small shopkeepers bawl out rudely to the many beggars

who came hourly to beg at the doors, and it made men ruthless in paying small fares to the rickshaw pullers, of which there were ten times as many as could be used, because the refugees were trying to earn something thus. Even the usual pullers of rickshaws who followed this as their profession cursed the refugees because, being starving, they would pull for anything given them, and so fares were low for all, and all suffered. With the city full of refugees, then, begging at every door, swarming into every unskilled trade and service, lying dead on the streets at every frozen dawn, why should one look at this fresh horde coming in now at twilight of a winter's day?

But these were no common men and women, no riffraff from some community always poor and easily starving in a flood time. No, these were men and women of which any nation might have been proud. It could be seen they were all from one region, for they wore garments woven out of the same dark blue cotton stuff, plain and cut in an old-fashioned way, the sleeves long and the coats long and full. The men wore smocked aprons, the smocking done in curious, intricate, beautiful designs. The women had bands of the same plain blue stuff wrapped like kerchiess about their heads. Both men and women were tall and strong in frame, although the women's feet were bound. There were a few lads in the throng, a few children sitting in baskets slung upon a pole across the shoulders of their fathers, but there were no young girls, no young infants. Every man and every lad bore a burden on his shoulder. This burden was always bedding, quilts made of the blue cotton stuff and padded. Clothing and pedding were clean and strongly made. On top of every folded quilt, with a bit of mat between, was an iron cauldron. These cauldrons had doubtless been taken from the earthen ovens of the village when the people saw the time had come when they must move. But in no basket was

there a vestige of food, nor was there a trace of food having been cooked in them recently.

This lack of food was confirmed when one looked closely into the faces of the people. In the first glance in the twilight they seemed well enough, but when one looked more closely one saw they were the faces of people starving and moving now in despair to a last hope. They saw nothing of the strange sights of a new city because they were too near death to see anything. No new sight could move their curiosity. They were men and women who had stayed by their land until starvation drove them forth. Thus they passed unseeing, silent, alien, as those who know themselves dying are alien to the living.

The last one of this long procession of silent men and women was a little wizened old man. Even he carried a load of two baskets, slung on a pole on his shoulder, the same load of a folded quilt, a cauldron. But there was only one cauldron. In the other basket it seemed there was but a quilt, extremely ragged and patched, but clean still. Although the load was light it was too much for the old man. It was evident that in usual times he would be beyond the age of work, and was perhaps unaccustomed to such labour in recent years. His breath whistled as he staggered along, and he strained his eyes to watch those who were ahead of him lest he be left behind, and his old wrinkled face was set in a sort of gasping agony.

Suddenly he could go no more. He set his burden down with great gentleness and sank upon the ground, his head sunk between his knees, his eyes closed, panting desperately. Starved as he was, a little blood rose in dark patches on his cheeks. A ragged vendor selling hot noodles set his stand near, and shouted his trade cry, and the light from the stand fell on the old man's drooping figure. A man passing stopped and muttered, looking at him:

"I swear I can give no more this day if I am to feed

my own even nothing but noodles-but here is this old man. Well, I will give him the bit of silver I earned today against tomorrow and trust to tomorrow again. If my own old father had been alive I would have given it to him."

He fumbled in himself and brought out of his ragged girdle a bit of a silver coin, and after a moment's hesitation and muttering, he added to it a copper penny.

"There, old father," he said with a sort of bitter hearti-

ness, "let me see you eat noodles!"

The old man lifted his head slowly. When he saw the

silver he would not put out his hand. He said:

"Sir, I did not beg of you. Sir, we have good land and we have never been starving like this before, having such good land. But this year the river rose and men starve even on good land at such times. Sir, we have no seed left, even. We have eaten our seed. I told them, we cannot eat the seed. But they were young and hungry and they ate it."

"Take it," said the man, and he dropped the money into the old man's smocked apron and went on his way,

sighing.

The vendor prepared his bowl of noodles and called

"How many will you eat, old man?"
Then was the old man stirred. He felt eagerly in his apron and when he saw the two coins there, the one copper and the other silver, he said:

"One small bowl is enough."

"Can you eat only one small bowl, then?" asked the vendor, astonished.

"It is not for me," the old man answered.

The vendor stared astonished, but being a simple man he said no more but prepared the bowl, and when it was finished he called out, "Here it is!" And he waited to see who would cat it.

Then the old man rosc with a great effort and took the bowl between his shaking hands and he went to the other basket. There, while the vendor watched, the old man pulled aside the quilt until one could see the shrunken face of a small boy lying with his eyes fast closed. One would have said the child was dead except that when the old man lifted his head so his mouth could touch the edge of the little bowl he began to swallow feebly until the hot mixture was finished. The old man kept murmuring to him:

"There, my heart-there, my child-"

"Your grandson?" said the vendor.

"Yes," said the old man. "The son of my only son. Both my son and his wife were drowned as they worked on our land when the dikes broke."

He covered the child tenderly and then, squatting on his haunches, he ran his tongue carefully around the little bowl and removed the last trace of food. Then, as though he had been fed, he handed the bowl back to the vendor.

"But you have the silver bit!" cried the ragged vendor, yet more astonished when he saw the old man ordered no more.

The old man shook his head. "That is for seed," he replied. "As soon as I saw it, I knew I would buy seed with it. They are up all the seed, and with what shall the land be sown again?"

"If I were not so poor myself," said the vendor, "I might even have given you a bowl. But to give something to a man who has a bit of silver—" He shook his head, puzzled.

"I do not ask you, brother," said the old man. "Well I know you cannot understand. But if you had land you would know it must be put to seed again or there will be starvation yet another year. The best I can do for this grandson of mine is to buy a little seed for the land—yes,

even though I die, and others must plant it, the land must be put to seed."

He took up his load again, his old legs trembling, and straining his eyes down the long straight street, he staggered on.

PEARLS. BUCK

a 19 »

FLYING

The idea of flying has been in the minds of men from very early times. Why were they not content to stay on the ground where they lived? What made them want to imitate the birds? There are always some men in the world trying to do things that have never been done before. There is something in the mind that drives them on to attempt new conquests and new successes. It was only natural that the sight of birds flying through the air should suggest the possibility that man might do the same. It looked easy; but it turned out to be exceedingly difficult. Many brave men have given their lives to make flying what it is today.

There is a story of long ago that a man called Daedalus and his son Icarus were imprisoned in the island of Crete in the Mediterranean Sea. They decided to escape by flying away from their prison through the air. They made some wings of feathers and fastened them to their shoulders with wax. Daedalus told his son to follow him, and they set out across the sea to Sicily. Daedalus was wise and was content to fly at a moderate height. But Icarus, being young, was more adventurous and less wise; he became excited with this new way of travelling and flew high up, too near the sun, which melted the wax holding the wings to his shoulders. He fell into the sea, and Daedalus reached Sicily alone.

This old story shows that, even in the ancient days, men were thinking how wonderful it would be to fly. Yet it is only a story and, like many of the things which we read about in old books, it came from men's imaginations and not from real events.

Many have heard the story of Abbas ibn Firnass, who was an Arab living in Spain after his countrymen had conquered that country. He decided to fly. Fixing wings to his arms, he jumped off from a high place but, after flying for a short distance, fell to the ground and was hurt. His failure was supposed to be due to the fact that he had omitted to provide himself with a tail.

There are other stories about flying later on in the history of the world. One of them tells how an Italian decided to show King James the Fourth of Scotland that it was quite possible to fly. He flew off from Stirling Castle in Scotland, using wings made from the feathers of birds, and we are not surprised to hear that the attempt was a failure. He fell to the ground and broke his legs. To explain his failure, he said that he had used the wrong kind of feathers, but we do not hear that he tried again.

* * * *

In the thirteenth century there lived a remarkable man called Roger Bacon. Among other things, he is said to have invented gunpowder and the air-pump. He suggested that a hot-air balloon would rise in the air. His idea was to construct a hollow sphere or ball and use a fire to make the air inside hot. This plan was very different from the earlier one of using wings made of feathers, and we know that it was successfully put into practice hundreds of years later. But Bacon lived too early in the world's history; the world was not ready for his idea, and it remained only an idea in his lifetime.

Centuries after Bacon had made his sensible suggestion, some very foolish ones were made. One man thought that a swan's eggs filled with mercury and sulphur would rise towards the sun. Another said that vessels filled with

Flying 97

the dew of morning would carry a man up into the air. Nonsense of this kind shows that men knew nothing whatever about the conditions that would make flight possible. If they had tried their own ideas, they would soon have discovered how useless they were.

Not until the eighteenth century did flying actually begin. Two brothers whose name was Montgolfier noticed that paper bags rose into the air over a fire. They were Frenchmen, and after them France was to take a leading part in the early development of flying. They succeeded in making a hot-air balloon which rose in the air. After the first experiment they decided that the time had come for the first air passengers to make their journey. These passengers, however, were not people; they were a duck, a sheep and a cock. The sheep unfortunately injured the cock before they set out; but apart from this small accident the animals suffered no harm, and made a successful flight of about eight minutes in the balloon.

Encouraged by this experiment, other men in France tried a balloon filled with hydrogen instead of hot air. Cavendish, an English scientist, had found in 1766 that hydrogen is lighter than air, and it seemed probable that a balloon filled with this gas would rise satisfactorily. It did. It went up to 3,000 feet and stayed in the air three-quarters of an hour. It came down near some French farmworkers, who were so angry and terrified when they saw this monster come down from the sky into their fields that they tore it to pieces.

In one of the first ascents by balloon the passengers were a cat and a dog. As the balloon was descending, loud shouts warned a householder that something unusual was happening. Rushing into his garden to find out what was the matter, he was surprised to see a cat and a dog fall at his feet out of the sky. The animals, finding that they were approaching the earth, had jumped out. He was so

amazed that he cried out, "Good heavens! It's raining cats and dogs!" People laughed, for he seemed to give a real meaning to the old saying, "It's raining cats and dogs," which also means that it is raining very heavily.

The next necessary step was for a man to go up in a balloon. In the history of invention and discovery, there often comes a time when some daring act must be done if any further progress is to be made. Men with the necessary courage are always to be found, a fact which may make us proud to belong to the human race, whatever its faults may be. In October 1783, a man called Pilâtre de Rozier went up in a Montgolfier fire-balloon. The fire was made of chopped straw and was carried underneath. This balloon was not allowed to fly away, but was fastened to the ground by a long rope. In the following month, accompanied by the Marquis d'Arlandes, de Rozier went up in a free balloon and travelled five miles, rising to 500 hundred feet on the way. This was the beginning of man's conquest of the air, for others, encouraged by de Rozier's success, made other flights of the same kind, some of them using hydrogen in their balloons instead of hot air.

Lunardi was a famous balloonist in Great Britain. The Prince of Wales was among the enormous crowd of people who went to see him go up in 1794. He took with him a dog, a cat and a pigeon. With the idea of trying to guide the balloon, he took oars up too. He made a successful flight lasting an hour and a half, came down safely, and went up again for another three-quarters of an hour. His courage and skill brought him great fame, and he was presented at court. He made many other successful balloon journeys before his death.

After these triumphs, as we should expect, longer and longer flights were made in balloons. One man flew 1,193

Flying 99

miles from France to Russia. Improvements were made in the balloons. A valve was put at the top of the gas-bag, so that some of the gas could be let out to make the balloon descend. Sand was carried which could be thrown out to make the balloon go higher. Thus the balloonist could choose, to some extent, the height at which he travelled; he could leave a current of air which was taking him in the wrong direction and try to find one that suited him better. But balloons have never been a satisfactory method of travelling; one is never sure which way they will go. No one has ever bought a balloon ticket from Cairo to Bombay.

The airship was a development of the balloon. As it was provided with engines, it could be made to go in any required direction. Unfortunately the hydrogen which kept it up was very inflammable, and many accidents occurred. Several enormous airships caught fire and were completely destroyed together with their passengers. Nowadays this type of machine has almost disappeared from the sky, being considered too dangerous for practical use.

* * * *

It is the aeroplane that has conquered the sky. The fundamental difference between the aeroplane on the one hand, and the balloon and the airship on the other, is that the aeroplane is heavier than air. It flies because of its motion; if it stops moving, it falls. Boys at school make darts of paper which work on the same principle. At first they made gliders, which are aeroplanes without engines. To begin the flight, the airman had to take off from some high place and glide down to a lower one; or the glider was pulled by a rope which was afterwards dropped. Many successful flights were made in gliders, and the next thing to do was to fit an engine to one and see if the machine could fly without other help. Steam-engines

were first tried, but they were too heavy to be of any real use. One such machine, made in 1884, consisted of a large number of wings one above the other and was driven by a steam-engine. It is said to have risen for a moment off the ground. Another rose, but fell and was damaged. It was not until the internal-combustion engine, which is very light for the power it develops, was fitted to a machine that any real success was obtained.

On 17th December, 1903, Orville Wright, an American, flew safely in a heavier-than-air machine for twelve seconds. He and his brother Wilbur had made a lot of experiments and had taken immense trouble to study the art of flying in gliders before they attempted to fly their aeroplane. Orville came down safely after the first short flight, and on the same day the experiment was repeated three times. The longest of these flights covered a distance of 852 feet and lasted fifty-nine seconds. The machine which was used had an engine developing only sixteen horsepower but the aeroplane reached a speed of thirty-five miles an hour. The two brothers continued their experiments after their first success, and in 1908 Wilbur gave some exhibitions of flying in France which astonished all who saw them.

The Wright brothers laid the foundation of modern flying. Soon others followed in their footsteps. Louis Blériot, a Frenchman, flew across the English Channel from Calais to Dover in 1909. Prizes were offered for flights from one place to another. Competition increased. The aeroplane improved more and more as its behaviour became better understood. More powerful engines were developed. In 1919, Sir John Alcock and Sir Arthur Brown made the first flight across the Atlantic Ocean, and in the same year an aeroplane flew from England to Australia. The age of air travel had arrived.

Flying 101

What were the difficulties which the early pioneers had to overcome in making successful aeroplanes? One of them was to decide what general system ought to be used. Naturally, the first idea was to use wings as birds do, and we have seen how some men actually provided themselves with wings fastened to their arms, and how they failed. It is an interesting fact that when men try to do the same things as nature does, they usually have to do them in a different way. Carriages, trains and motor-cars use wheels instead of legs; acroplanes have fixed wings, unlike those of birds; boats are moved by oars or the wind, and ships by paddle-wheels or serews, though not one of these methods is used by any fish. In general, too, the wheel, a necessary part of most machines, never appears in nature. Thus the decision to use a fixed wing was one that had to be made before any acroplane could fly satisfactorily. Some of the early machines had a lot of wings of various sizes and in different positions. The number was soon reduced to a maximum of three, one above the other. The machine with three wings (it looks like one with three pairs of wings, for a wing stretches right across the machine from side to side) was known as a triplane; it disappeared from the sky long ago. The biplane, with two wings, lasted longer and could be seen fairly frequently up to the war of 1939, though it is now becoming a rarity. The monoplane is now the commonest type of aircraft. It has the advantage that it presents less resistance to the air than other types, and can therefore fly faster with the same power. If you visit one of the big commercial aerodromes at the present time, you will notice that nearly every aeroplane coming down to land or taking off for distant countries is a monoplane.

We have already noted another great difficulty of the early pioneers. It was the provision of an engine which was at the same time light enough and strong enough to give the necessary power. Once the machines had been fitted with internal-combustion engines and would fly, their behaviour could be studied with a view to improvement. In preference to a flat wing, a curved, or cambered, wing was used. This gives greater lifting power; it causes a partial vacuum above itself, which helps it to do its work. You have probably noticed, also, that many modern wings slope upwards away from the body, a method of construction which gives greater stability and safety.

Air travel has now become a common event. Even schoolboys and schoolgirls travel thousands of miles alone to distant places to spend their holidays with their parents. Accidents do occur, but they are infrequent. We read of the accidents in our daily papers and perhaps get a false idea of their number. We do not hear of the thousands of safe flights made every month, because they have no news value. Nevertheless, there is still some slight danger in travelling by air, as there is in any form of travel. If the engines fail, the only way in which the pilot can keep the air rushing under the wings to support the machine is to point the nose slightly downwards, and let the force of gravity do the work usually done by the engines. If he is at a good height when this happens, he may have the time and the luck to find a suitable place to land, and so avoid any serious consequences. But if the engines fail when the aircraft is taking off, a crash can rarely be avoided; there is no time to do anything about it. Therefore the engines are kept in the best possible order, and tested again and again. If you have travelled by air, you may have noticed that the pilot races his engines for a considerable time before taking off, to warm them up and to be sure that there is nothing wrong.

What of the future? It is certain that air travel will

103

increase enormously, for it is quick and convenient. An aeroplane needs no long roads or rails for its journey; it crosses the sea and the land equally well; deserts and forests are no obstacle to its speedy flight. Development and improvement are sure. Already some new types are in the sky. The jet-plane does not use an airscrew, but depends for its power on the forcible ejection of gas towards the rear. It travels at an enormous speed and often makes a whistling sound as it shoots through the air. It seems possible that before many years have passed, the airscrew will disappear and be replaced by the jet. If Hero, the maker of the first steam toy, were alive today he would be pleased to see the principle of his jet applied to the most modern of aircraft.

Dangers will have to be faced in the future, as in the past. One of the foremost in the minds of inventors in recent years was connected with the speed of sound. Sound travels through the air at about 1,100 feet per second, or about 760 miles per hour. It was feared that aircraft might be unable to go faster than sound, but by 1949 both British and American pilots had flown faster than the speed of sound. In the same way, courageous men will face the dangers of the future.

G. C. THORNLEY

MASS PRODUCTION

"A GREAT MASS" of something means a great amount. When the new method of manufacturing articles in great numbers was introduced, a new name was wanted for it and "Mass production" was the one that came into usc.

In what ways does mass production differ from the older methods of manufacture? Formerly a craftsman, or skilled workman, often made the whole of an article himself by hand. He put into his work all his skill, all his experience. He was proud of the fruits of his labour. His reputation, his standing among his fellows, depended on his skill and on his character. He would have been ashamed if any serious fault had appeared in his work. He was envied and admired by fellow-craftsmen whose skill was not equal to his own. Articles made in this way could not be mass-produced. Each article differed slightly from the others; in every one there was something of the maker's individuality. The finished article was sold at a high price, the price representing the time and the skill of the craftsman who had made it.

Many such articles, made long ago with loving care, possess a quality and a beauty that mass-produced goods cannot equal. The wonderful pottery of ancient China, the lovely carpets of Persia, the engraved swords of Damascus, the silver-ware of the Middle Ages—all these things show the individual craftsmanship of their long-dead makers.

These articles were made for the rich and for those who were moderately well off. The poorer classes could not

hope to possess works of art. Their household utensils, their clothes and their farm tools were roughly and cheaply made, though very practical in serving the purposes for which they were designed.

* * * *

The industrial revolution saw a great increase in the population of Europe. These people wanted goods, tools, clothes, houses and all the things that make civilized life possible. The goods which they wanted had to be fairly cheap, cheap enough to be purchased out of the wages earned in factory or workshop. There were no restrictions on the manufacture of goods as there are in time of war, and each factory competed with its rivals in finding markets for its products. The demand for goods was great, both at home and overseas.

In deciding which goods to buy everyone is influenced by two considerations, price and quality. The everincreasing demand was for goods of high quality at low prices. That factory and that country prospered whose goods competed successfully with its rivals as regards quality and price.

In the nineteenth century, the desire to produce highquality goods at a low price led to what is now called mass production. The phrase nowadays is especially associated with the name of Henry Ford, who so successfully applied mass-production methods to the manufacture of motorcars. His business rivals were quick to imitate him, thus proving the truth of the old proverb, "Imitation is the sincerest form of flattery."

But Mr. Ford was by no means the inventor of mass production. It is difficult, indeed, to say who was. When the first large mills for the manufacture of cloth were built, then we may say that mass production began. The invention of the steam-engine gave manufacturers the cheap power which they needed. Brilliant men perfected cotton gins and looms. When one huge machine began to perform rapidly the operations previously done slowly and laboriously by hand, the age of mass production was born.

A visit to a stocking factory is an interesting experience. One sees seven or eight huge, complicated stocking machines being tended by a single skilled worker. They are so complicated that only a mechanic can follow all the operations. Hundreds of wheels are turning, hundreds of fine, delicate threads are being fed into each multiple machine. Each machine manufactures a number of stockings at the same time, and you can see the stocking legs coming out of the bottom. When the leg is long enough, the machine automatically changes its method and begins to knit the foot. The operator's duty is to keep an eye on the machines, to mend broken threads, and to discover the cause of any stoppage. He has, in fact, only to keep the machine at work and to take away the finished article. The result is that the public, in ordinary times, can buy goods at a low price. A woman is poor indeed if she cannot afford to buy a pair of stockings.

The price of any article depends chiefly upon the cost of labour and raw materials, though there are other expenses such as those of advertising and transport. Mass production has reduced the cost of labour to a mini-

mum.

As new methods are invented and new manufacturing processes developed, output increases more and more. The aim of every manufacturer is to reduce costs and increase output.

Most of the articles of everyday use are mass produced. The buttons on your coat, your shoe-laces, pens, pencils and exercise books are all good and cheap because they are mass produced. Cigarettes, to which most men and

many women are willing slaves, are manufactured and sold by the million. Tobacco and paper are put into one part of a machine and endless cigarettes emerge at another. The long rolls of paper-covered tobacco are cut up into the right lengths and a moving belt carries them away. Another machine counts the cigarettes and packs them into boxes. From the time when the tobacco is put into the machine until the purchaser opens the box, no hand touches the cigarettes.

* * *

In every factory that assembles complicated articles by mass-production methods, there is a conveyor belt. As its name shows, this is a moving belt which conveys, or carries, the articles to the workers. Each worker stands at a bench, and as the belt moves past him he takes from it the article that is being made. He performs one operation, and only one. He therefore becomes very skilled at doing this, and does it quickly. When he has done his job, he puts the article back on the belt and picks up another, which he treats in exactly the same way. This is an extremely efficient method of manufacture; for the worker need not go and fetch his materials, and no one has to bring them to him: Thus no time is lost. Even stupid workers can be taught to do just one operation. The result is that a complicated article is assembled speedily and economically.

The conveyor-belt method is used in most motor works, even when an actual belt is not used. The chassis, or frame of the car, is taken from a heap. A gang of men, perhaps four on each side, quickly attach wheels to it taken from another heap near them. When the wheels have been put on a boy pushes the chassis farther down the workshop to another gang of men who perform another operation. Above their heads is a kind of overhead railway which

covered the country; and the country people have been enabled to move about and visit the town. Old people who expected to pass all their lives in one place have in the last twenty years travelled, mostly by bus, far greater distances than they ever travelled before. Much of the food of the cities is brought in by the motor lorry, which is becoming a keen competitor of the railway. Millions of cars and lorries are already running on the roads of the world, and the number will tend to increase as methods of mass production improve.

Another example of mass production is the morning newspaper. To see huge printing presses turning out and folding tens of thousands of newspapers, all exactly the same and all faultless, is an experience which can never be forgotten. The printing press is one of man's cleverest inventions. The great machine seems almost alive: it does everything to the newspaper except write the original copy. It is this machine that brings the daily newspaper, with its pictures and its thousands of words, within the reach of the poorest of men.

The output of goods in large quantities profoundly affects the standard of living of the people of the world. The main duty of statesmen is to work for the welfare of their fellow-countrymen. Their efforts should be directed to improving the living conditions of the people, their housing, their clothing, their food and their wages. There is no reason why the standard of living should not rise continuously. America is the place where the standard of living of ordinary people is the highest in the world. A high standard of living means high consumption of goods by the ordinary people, good housing and clothing, sufficient leisure to enjoy life.

In many countries, before the last disastrous war brought peaceful progress to a standstill, improvement in all these matters was continuous. For this rise in the

standard of living, mass production was in large measure responsible. Yet, today, vast areas of the world are stricken with poverty. Countlers millions are crying out for goods which they cannot buy, either because they are not available at all, or because they are too dear. The methods of mass production scientifically applied will, it is hoped, change this state of affairs and gradually improve the conditions of the people of the world.

This system of manufacture is not, however, an unmixed blessing. Most really happy men get more satisfaction in life from their work than from their leisure. Nearly all of us are happier when we are actively engaged than when we have nothing to do. During the school holidays, after the first week or two, many schoolboys wander miserably in the streets seeking amusement. They are much happier when they are busy at school and interested in their work. Time flies when one is busy: it drags when one has nothing to do. One of the necessities of a happy life is an interesting job, not necessarily an easy one, but one that gives us the opportunity to use our abilities and demands the best that is in us. It is a serious criticism of mass production if we come to the conclusion that most of the workers get no satisfaction, except for their wages, out of their labour.

We have seen that many craftsmen of former days put their heart and soul into their work. In many cases they produced the articles themselves from start to finish. The pleasure and pride which they felt in a well-made article cannot be equalled by the factory worker of today.

There are still some of these craftsmen in the world. Not everything is mass produced. Suppose we find in a village an elderly man who has done nothing all his life but make fine furniture. Suppose we see and praise his

handiwork and order a fine chair from him. After some weeks have passed, he sends us word that the chair is finished and we go to take delivery of it. We praise the chair and pay the price. Then we take an axe and break the chair to pieces before the eyes of its maker. It is difficult to know what he would do. He would certainly be very sorry. He might even burst into tears at seeing the fruit of his skill and labour reduced to firewood in this barbarous manner.

Suppose then that we go to a motor works where a brand new ear is awaiting us. We pay for the ear and take delivery. Instead of driving away, we call together a number of the workers during the dinner-hour and praise the ear that they have made. We then take a tin of petrol and pour it over the ear, strike a match and set fire to it. The assembled workmen would probably not care in the least. They might even laugh. They might suppose that an escaped lunatic had arrived at the factory. But nobody's feelings would be hurt by the stupid destruction of the article that they had made. Each worker contributes so little to the finished article that he does not think of it as the fruit of his own labours. His personal interest in it is very small indeed.

Workers who repeat the same operation day after day can take no pleasure or pride in their work. Their chief pleasure in life is outside the factory. Their work is dull, and they spend their time with one eye on the clock. It is realized that modern work is often dull, and in some factories a wireless set or a gramophone is turned on to provide music for the workers. The title of a common programme given by the British Broadcasting Corporation is "Music while you work". The provision of entertainment while the factory wheels are turning does not cause the work-people to neglect their duty; on the contrary, it increases output. In spite of various attempts to brighten

the lives of the workers, however, the average man in a factory is rather to be pitied than envied. The duliness of his life is one of the drawbacks of mass production.

Some people consider that man is becoming the slave of the machine. Certainly machines are playing an everincreasing part in our lives. Let us hope that they will never become more important than the men they were invented to serve. Charlie Chaplin, in his film "Modern Times," drew attention to this danger. In the film he got a job in a factory that employed mass-production methods. He had to stand by a machine with a spanner in his hand. An endless belt passed in front of him carrying slowly an endless line of articles. As each one passed, he tightened one nut on one bolt with his spanner. His work was done with one turn of the wrist repeated throughout the day. Very soon his mind became affected and the film shows the amusing things which he did as a result of his mental disorder. Although it was very funny, the film had a serious side. It showed that the kind of work which many people do, far from giving them pride and pleasure, is more likely to fit them for the lunatic asylum.

We must all hope that means will be found to retain the advantages arising out of mass production, while at the same time giving the worker some of the pride and pleasure of the old craftsmen.

G. C. THORNLEY

MEDICINE

There are people who take every opportunity of deploring the present age and regretting "the good old times" that are gone. Certainly life in the past seems to have been more leisurely than it is now. Money was worth more, and those who had it could easily procure what they needed. Undoubtedly life was pleasant for a small class of people, however unpleasant it may have been for the great majority. But life, if pleasant, was also likely to be quite short. "A short life and a merry one" seems to have been the motto of the well-to-do. "A short life and a hard one" would have suited the poor as a motto.

A man today expects to live many years longer than his forefathers did; a woman even longer. What is called our expectation of life has been, and still is, increasing. A hundred years ago it was much less. Today epidemics are rarer, and less violent when they occur. Fewer babies die; more people reach old agc. We enjoy healthier lives than our ancestors did, and we should be grateful to those who have taught us how to live, and whose researches have so greatly increased human happiness. The real benefactors of mankind are not the generals and politicians, but those whose labours have led to an improvement in the health and happiness of the common men. The better health of the people of today is due not only to doctors and their researches but also to a widespread improvement in living conditions. We are cleaner in our habits; our houses, factories and cities are far superior to those of our ancestors; and a knowledge of what to do and what not to

do to maintain good health is more widespread than it used to be. Sickness has, to a great extent, lost its fears; we face our doctors with a smile on our lips and usually with no terror in our hearts. If we compare our lot even with that of our great-grandfathers, we should indeed feel

grateful. In the "good old days", doctors had no special training. A young man was apprenticed to a doctor and picked up what knowledge he could. When he was old enough, and thought he knew enough, he started to practise himself. The scientific knowledge of the best of them was meagre, their methods rough. Almost anyone with sufficient courage could practise surgery; the village barber was often the village surgeon too. Ignorance of the causes of illness led to extraordinary methods of treatment. In a large number of illnesses "bleeding" was prescribed. A vein was opened and a quantity of blood drawn from the patient. In England in the seventeenth century, a doctor called Sydenham thought he could cure nearly all cases of illness by bleeding; he never extracted less than eight ounces of blood, usually ten, and sometimes as much as forty! Others were particular as to which part of the body the blood should be taken from, and at one time it was considered important to choose the right day of the month to bleed the patient. No one knows how many deaths have been hastened by this drawing of precious blood. Nowadays this practice has almost gone out of fashion. How many of our friends have been bled? Probably none! On the contrary, many lives have been saved by blood transfusion, that is, by allowing blood from the body of a healthy person to flow into the body of a patient who has lost too large a quantity of his own, Blood for this purpose need not go directly from one person to another; it may be stored in bottles and kept ready for the time when it is needed. People who offer to give

115

blood to save the lives of others are called blood donors. Because they are strong and healthy, their bodies soon make up for the blood that they have lost, though they may feel rather weak for a short time.

In the days before the discovery of anaesthetics, various methods were used to keep the patient quiet during an operation. One way was to knock him senseless. During many operations, several strong assistants held the patient down while the surgeon did his best, or worst. Their methods were rough and ready. On the battlefield the surgeon might have to amputate a soldier's leg. The stump was then plunged into a bucket of hot liquid tar which stuck to the wound and stopped the bleeding.

In hospitals the doctors would go from one patient to another with the germs of deadly diseases on their hands without knowing it. Ordinary people hated hospitals and dreaded doctors, and no wonder. A sick person entering a hospital was quite likely to catch an additional disease, and far too many patients left the hospital only for the graveyard. Mistrust of doctors is still not entirely dead; some old people declare that when their time comes they intend to die without the assistance of any doctor. When some people are urged to seek medical advice, they reply, "I have never been to a doctor in my life, and I don't intend to start now." Stupid statements like this show that the speaker has no idea whatever of the enormous advances made in medicine in the last hundred years.

Health has always been closely connected with happiness. From the beginning, therefore, man must have made efforts, however feeble and ignorant, to seek its source. How to relieve pain, how to cure sickness, how to treat injuries, which plants to eat and which to avoid, all these must have been the objects of man's attention from the earliest times.

The early civilizations all had their wise men, part of whose stock of knowledge was skill in the treatment of illness. By the time of the Babylonian and the Egyptian empires, a great number of medical ideas had accumulated, some of them sound and some, according to our standards, extremely unsound. The Greeks, who were pioneers in many branches of learning, obtained much of their knowledge from earlier scientists. They improved on what they had learnt, and it was the Greeks who laid the foundations of modern medical science.

One of the most honoured names in medicine is that of Hippocrates, sometimes called the Father of Medicine. It was he who first applied scientific methods to the study of disease. He and his disciples patiently observed facts and patiently recorded their observations. From the effect, they tried to determine the cause. They did not believe in magic, or in the influence of the stars, or in the power of the gods; they believed in the constant sequence of cause and effect. This belief was nothing less than a new

religion.

Hippocrates the Physician was born on the island of Cos about 460 B.C. On this island a school of medicine had long been established. A great amount of badly assorted medical knowledge was in existence. Hippocrates and his disciples introduced scientific methods into the medical school of the island and into the whole of the Greek world. The method of seeking the cause after observing the effect is still called the Hippocratic method: another name is the inductive method. To us it seems a simple and natural way of working; but to people whose lives were governed by a belief in magic, in the influence of the heavenly bodies and in the power of numerous gods, the new method was a revolution.

In spite of the great influence of Hippocrates on medicine, we know little about him personally. He is said to

have been "learned, observant, humane, sympathetic with his patients, desirous that his experience and knowleged should benefit others, orderly, thoughtful and calm. pure of his mind and master of his passions". He lived a wandering life, practising and teaching; his pupils included his own sons and sons-in-law. He himself was a good example of the value of his teaching, for he lived to be a hundred years old. Before his time a certain illness had been called "the divine disease", because it was thought to be caused by the ill-will of the gods. Hippocrates opposed this idea, declaring that it must be due to ordinary causes, like other diseases. "As for this disease, called divine, surely it has its nature and causes like other diseases. It arises, like them, from things which enter and leave the body. . . . Such diseases have their antecedent causes which can be discovered by those who seek them."

* * * *

When the first great university of the world, the Museum of Alexandria, was established, medical science became an important study. There were two chief branches of this study, anatomy and physiology. The earliest important teacher of the medical school was Hcrophilus, who was a contemporary of Euclid. It is interesting to remember that the practice of dissecting the human body for the instruction of pupils, still a common part of medical teaching, was started in Alexandria more than two thousand years ago. Herophilus compared man's anatomy to that of animals. Paying special attention to the brain, he recognized that it was not only the centre of the nervous system, but also the seat of the intelligence. This was a remarkable discovery; for most people of that time thought that the heart was the seat of the intelligence, and they continued to think so for long afterwards. This idea has left its mark on our language; we still talk

of learning things "by heart"; we still say, "I took his words to heart"; and we still have "a heart to heart talk" with a friend. There are other expressions in English where the heart is used as the seat of understanding, feeling or thought.

Another distinguished professor of Alexandria was Erasistratus who specialized in the study of the brain and the nervous system. He showed that certain nerves carried messages to the brain (the sensory nerves) while others (the motor nerves) carried messages from the brain to the muscles. This discovery seems to have been either forgotten or neglected until it was rediscovered in the nineteenth century by Sir Charles Bell.

Both Herophilus and Erasistratus are accused of the terrible crime of dissecting the bodies of living men. Some historians have examined this charge and are convinced of its falsity. But both scientists, in the passion for scientific discovery, might not have hesitated to use the living body for their experiments. Life was cheap, and criminals sentenced to death might well have been placed at the disposal of the medical school. Valuable knowledge, of benefit to the whole race, might have been obtained by an experiment on a living, rather than on a dead body. A scientist might not consider the accusation a very terrible one.

With the fall of the Greek empire, systematic experiments and regular medical study seem to have come to an end. Besides noticing what the Greeks discovered, we ought to see where their ideas were quite wrong. They discovered much, and their knowledge formed the basis on which other medical knowledge was built when regular investigation was resumed after the Revival of Learning. But their wrong ideas were an obstacle in the way of progress when scientific study was begun again.

Erasistratus supposed that air was taken in by the

119

lungs and then passed to the heart. Here, the air passed into the blood and was changed into a peculiar kind of "spirit" which was carried by the arteries to all parts of the body. This spirit was called the "vital spirit". When it reached the brain, it was changed into another kind of spirit, the "animal spirit". This animal spirit reached all parts of the body through the nerves, which he wrongly thought were hollow.

It is fairly easy to see why the ancients believed in this vital spirit, which began as air and was changed into something else by blood. The essential difference between a living and a dead body was that the former breathed and the latter did not. Knowing this, they naturally thought that breath, or what breath became, was life. Man consisted of two parts, body and vital spirit; when a man died, his "spirit" left the body and joined the world of spirit which was thought to be above the seventh heaven.

Galen, another great figure in medical science, lived several hundred years after Erasistratus. Though he was great and famous, he had some mistaken ideas like those of his predecessors. According to him, when a man breathed, he drew in some world-spirit which entered his lungs and then his heart. Galen also believed that the nerves were hollow. He had little knowledge of the work of the heart. Nevertheless, his ideas concerning anatomy and physiology were put into a number of books, and were the basis of medical knowledge until the sixteenth century.

What is the secret of the long life of some of these ideas? The answer is that they fitted in well with all the religious ideas of the time. Galen's works were translated into Latin, Syriac, Arabic and Hebrew and were studied for more than a thousand years. Learned men ceased to watch

effects and determine their causes. They devoted themselves to the study of God's will. Theology became the queen of learning and remained so till the time of the Renaissance. The real work of the heart, and the circulation of the blood, remained undiscovered until the seventeenth century when William Harvey, in discovering them, laid the foundation of the modern science of physiology.

It was in 1628 that Harvey published his discovery together with a proof of its truth. He showed that the heart has a capacity of only two ounces. Every time it beats, it throws out two ounces of blood. As a normal heart beats 72 times a minute, it throws out $2 \times 72 \times 60 =$ 8,640 ounces=540 pounds in an hour. This is three times the weight of an average man. How can the heart pump out this enormous quantity of blood? It must be the same blood going and coming, leaving the heart and returning to it. This knowledge that the blood of animals is always circulating opened the door to investigation. It led to a great advance in the study of the working of living bodies, which is called physiology. Why does the blood circulate? What does it carry? Where does it pick up its load, and where put it down? To answer these questions has been one of the tasks of investigators since the time of Harvey.

At about this time, observers looking at blood through the microscope noticed that it seemed to be composed of little red bodies: they discovered the corpuscles of the blood. Later the microscope led to the discovery of germs or microbes. When the relation of germs to disease was discovered, a definite step forward was taken by medical science. We have not yet discovered the roots of all diseases, for some of the things that cause them appear to be so small that they cannot be seen through the microMedicine 121

scope; yet this instrument has been of enormous value to medical research, and without it the causes of malaria and of yellow fever would not have been found.

The method by which microbes increase is interesting. An observer was once watching through his microscope a number of them swimming about in some liquid. He noticed that one was swimming up a little channel into a pool. Taking a tiny brush, he swept away the channel and this imprisoned the single microbe in the pool. As he observed it, he saw its ends grow thicker and its middle grow thinner; he watched this continue until finally the microbe divided itself into two parts: there were now two instead of one. This method of reproduction in living creatures had never been known before. It explained how microbes were able to increase very rapidly and cause death.

* * *

Of all the discoveries of medical science, few have benefited man so directly as that of the anaesthetic. The first anaesthetics were gases, ether and ehloroform. No longer is it necessary to suffer the terrible pain of an operation, or to be knocked senseless before it takes place. A few breaths of gas, and one falls into unconsciousness, awaking to find the operation over. Other anaesthetics besides gases are now available; a drug may be injected into the body of the patient with a needle, and he immediately becomes unconscious. In some cases he is able to get up and walk about the next day, for the after-effects of the anaesthetic are slight.

Another discovery of vast importance to medicine was made by Röntgen, professor of physics in the University of Wurzburg in 1895. The discovery was made partly by accident while the professor was experimenting with a cathode-ray tube. This is a glass tube from which the

air has been almost completely removed. When an electric current at a high voltage is passed through the vacuum rays are emitted from the negative terminal called the cathode. Thus the rays are called cathode rays. (It is this kind of tube that shows the picture in a modern television receiver.) While Rontgen was carrying out his experiments he covered the tube with a box made of black paper. Now black paper will not allow cathode rays to pass through it, yet he found that some other rays must be coming through it; for a screen covered with some barium salts which happened to be near his apparatus began to glow. He tried what would happen if he put things between the tube and the screen, and discovered that the rays would pass through a book of a thousand pages, a piece of wood, and even thin sheets of metal. When he interposed his hand, he was able to see the bones inside. As he did not know what kind of rays these were, he inside. As he did not know what kind of rays these were, he called them X-rays, the name which they still retain. The importance of this discovery was immediately understood, for it enabled doctors to see inside the living body without damaging it, and to take photographs of the positions of such things as broken bones in the foot, and swallowed coins in the stomach. X-rays are used every day in all parts of the world at the present time; the X-ray department of a modern hospital is a very busy place indeed.

Recent years have added to the doctor's weapons in his fight against disease. In 1938 the British firm of manufacturing chemists, May and Baker, first prepared a drug which was given the number 693. It proved to be very successful against pneumonia and similar infections, and has become famous as "M & B 693". This was the drug used to cure Mr. Winston Churchill when he fell ill

during the last war. It, and others like it, are now widely used to deal with certain infections and poisons in the body.

The world-famous drug penicillin was first discovered by Professor Alexander Fleming in 1929: but it was not until 1940 that Professor Florey at Oxford obtained successful results with it. The wonderful cures that penicillin has brought about have made some people think that it will cure nearly everything. This is quite wrong. The diseases to which mankind is subject are so many and so varied that obviously no single drug or treatment can cure them all.

More recently still, a new drug called streptomycin has been found useful in the treatment of some cases of tuberculosis. Anything that will help in the fight against this terrible and widespread disease is a blessing to the human race. There is apparently some doubt concerning the value of streptomycin, and doctors do not claim that it always cures tuberculosis: far from it. Yet the British Medical Association now allows it to be used.

* * * *

Our hopes of getting better when we fall ill are now undoubtedly higher than those of our forefathers. But how much more satisfactory it is not to fall ill at all! Prevention is better than cure. To safeguard us against certain illness, doctors now rely upon inoculation and vaccination. "Oculus" is a Latin word meaning "eye"; the word eye is used for the round mark on a potato from which a little branch will grow. To inoculate means to put into the body something from which something else will grow. It has been known for a long time, since the time of Dr. Jenner, that if the germs of a disease in a mild form are introduced into the body, the blood builds up resistance to that kind of germ; and when, later, the body is exposed

to that infection, it can usually resist it successfully. The doctor injects into our bodies the dead germs of a disease like typhoid; the body begins to fight against these germs and soon is well prepared to attack typhoid germs when they enter it. The story of Dr. Jenner and smallpox is the beginning of the practice of inoculation against disease; though, for reasons that will appear later, his method was called vaccination.

Looking round at your friends' faces, you will see few, if any, that are covered with small round pits. Yet two hundred years ago, a great number of people had their faces disfigured in this way. They were those who had had smallpox and had recovered. This dread disease left its marks on its victims, marks which they carried to their graves. Edward Jenner, wanting to become a doctor, apprenticed himself to a surgeon who worked a good deal among country people. In 1768, Jenner, not yet a doctor, heard a dairymaid say that though there were many cases of smallpox in the neighbourhood she was not frightened because she had had cowpox. Jenner was interested and began to make inquiries; for learned people may sometimes learn a great deal by listening to ignorant ones. No one minded having cowpox, which was a mild disease, but smallpox was dreaded by all. Other doctors had heard of the idea that those who had had cowpox never caught smallpox, but they thought that it was an ignorant superstition, and they took no notice. It was some years before Jenner took any definite action to test the truth of the idea, but he did not forget it. In 1796 he decided to give eowpox to a person and see if it was any protection against the other more dangerous illness. He inoculated a small boy with matter taken from the hand of a dairymaid who had cowpox. A fortnight later, when he thought that the boy's blood would have strengthened itself against diseases of this kind, he inoculated the boy with smallpox.

This was a brave but dangerous thing to do. What would have happened if the boy had caught smallpox and died? But Jenner was confident, and his confidence was justified: the boy did not develop smallpox. A second similar experiment was equally successful.

Many doctors flatly refused to believe Jenner when he announced that he had found a preventive against small-pox. They declared vaccination a dangerous practice. But the dread of smallpox was in everybody's heart, and people flocked to Jenner to be vaccinated. The Latin word for cow is "vacca"; it is the root from which the word vaccinate was formed. Some of the "vaccine" used by Jenner was not pure and some harm was done; but when supplies of pure vaccine were available, the practice of vaccinating spread all over England and from England to other countries. We rarely hear of outbreaks of small-pox now, for most parents have their children vaccinated at a very early age.

Several other diseases such as typhoid, which used to kill people in thousands, are now much less dangerous; and if people were more careful about being inoculated every two years, typhoid might die out. It is true that a few people get typhoid even when they have been inoculated; but they usually get a mild form of the disease, and soon recover. Yet there are still some diseases that defeat the best doctors. One of these is infantile paralysis, the disease that President Roosevelt caught, but so bravely fought. It is showing signs of increasing. No one knows how it is spread; its germ has not yet been identified. Other diseases, too, have not yet been conquered; there is still plenty of scope in the field of medicine for the wisest brains and the bravest hearts.

No modern surgeon would dream of performing an opera-tion with instruments that had not been sterilized, that is. made surgically clean by steam-heat. Microbes no longer enter the wound that the surgeon makes: they are not allowed to come near it. The wound, therefore, has every chance of healing satisfactorily, and usually does so. In addition, the science of surgery has progressed to an astonishing degree. Some surgeons have even performed successful operations on the human heart. A new kind of operation on the brain is being performed for the relief of certain forms of madness. Blindness, too, can be cured in some cases. Some people are blind because the cornea, the outer covering of the eye, is not transparent. It was thought that if part of such a cornea was removed, and a portion of the cornea of a newly-dead person was stitched on in its place, the patient might recover his sight. This, as one may imagine, is a most delicate operation. Dillinger, an American gangster, who before his execution repented of his crimes, agreed that his eyes might be used to help medical science. When he was dead, his eyes were removed and rushed to a hospital where a patient was waiting. The cornea of the dead criminal was sewn on the eyeball of the patient, and grew there successfully. The ex-patient was soon walking about, no longer blind, but seeing through the cornea that once belonged to Dillinger. This operation has been repeated since. It is not a common operation, partly because it is difficult, and partly because there is not a plentiful supply of fresh eyes.

Never before in the history of the world has man known so much about his own body and the illnesses that attack it. Yet there are still difficulties to be overcome, curtains to be lifted, victories to be won. Many brave men have given their lives so that we may live. They have willingly inoculated themselves with germs, have exposed them-

selves to dangerous rays, have tested new anaesthetics on their own bodies, have sacrificed themselves to win some of the victories of peace. Others, following in their footsteps, will face new dangers and win new battles, and their names will be written on the roll of fame. Yet it is not only the famous men whom we honour. Every doctor in every part of the world, going about his daily work, fighting disease, bringing encouragement and hope to the sick, often turning sorrow into happiness, deserves our respect. There is no nobler calling than that of the doctor, the friend of man.

G. C. THORNLEY

ANDREW CARNEGIE

Millionaire Steel King His "Gospel of Wealth"

"It is a disgrace to die rîch." The man who wrote these words, and who gave away seventy million pounds because he believed them to be true, was born in a one-room attic home more than a century ago.

Andrew Carnegic was the son of a Scottish weaver, a native of Dunfermline. The father struggled to earn a living in what was a dying handicraft; the son was to make a fortune in the new machine industry which was beginning to swamp all the old handierafts. There could have been no greater contrast between the old and the new.

In what were known as the "hungry forties" of the nineteenth century, the elder Carnegie faced the prospect of starvation for his family. He could no longer get work. Even his looms were sold. At last Mrs. Carnegie, a woman of great character and pluck, persuaded her husband to make a new start in the New World. So in 1848 a sobbing but excited twelve-year-old boy watched the coast of Scotland recede, from the deck of a whaling schooner, and wondered what the magic land of America held in store for him.

Andrew Carnegie never for a moment forgot what he owed to his Scottish upbringing. Although poor, the Carnegie family were prominent citizens of Dunfermline, Andrew's father was a keen Radieal and Chartist.

He was a reader and debater, and taught his sons to love books and to express their opinions. Mrs. Carnegie was a devoted mother. "The child," she wrote to Andrew in later years, "that has in his father a teacher, companion and counsellor, and whose mother is to him a nurse, scamstress, governess, teacher, companion, heroine and saint all in one, has a heritage to which the child of wealth remains a stranger."

The sturdy, thoughtful Scottish boy began work in America in Pittsburg, full of ambition. The family were for a time desperately poor, the father sometimes making a little money as a hand-loom weaver, and sometimes by working in the cotton mills. Andrew started with a very unpleasant job in the boiler room of a bobbin factory, but this did not satisfy him for long. He became a telegraph messenger boy. At night he would lie in bed reciting in due order the names of householders in the Pittsburgh streets. He tried to remember where every man lived and what he looked like. Quick and confident in his own power, he determined to master his business. He would arrive early at the office in order to study the Morse code. Soon the officials noticed how keen and trustworthy was this boy, and he was promoted to be an operator. Andrew Carnegie was now the mainstay of the family.

One of the business men who used the telegraph office was attracted by the intelligence of the young operator, and gave him a job as telegraphist in the Pennsylvania Railroad Company. At eighteen young Carnegie felt capable of anything. With his enthusiasm for his work and his will to get on, he combined a love of reading and an interest in public and social questions which made life always full and interesting. As a young man in the service of the railway company, Carnegie showed the qualities which were to make him the most successful business man of the nineteenth century. One day when he was left

alone in the office and a complete breakdown occurred on the line, he took control, and by sending out sheafs of telegrams in his chief's name he managed to get all the trains running and the whole system working smoothly.

"What do you think that little white-haired Scotch devil of mine did today?" his chief asked a friend. "He ran every train on the division in my name without the slightest authority." "And did he do it all right?" "Oh ves, all right."

It was not long before he was offered the post of rail-road superintendent. "Do you think you could manage it?" asked his chief. "I was at an age," wrote Carnegie

later, "when I thought I could manage anything."

While still on the railway, Carnegie began to make money. One day he met a man who showed him a little model of a railway sleeping-car. With his gift of imagination, Carnegie saw in his mind the great American railroads swept by sleeping-car expresses, and he persuaded his company to build some of these cars. The grateful inventor gave him a share in the new company, and by the time he was twenty-four Carnegie was receiving £1,000 a year from this source.

During the American Civil War (1861-5), Carnegie was organizing railway services for the Northern government. All the time he was investing and reinvesting his money. When he was twenty-seven his income reached the great total of £10,000 a year. It was before the days of huge American fortunes, and the achievement is astounding. He was always able to make quick decisions, to take risks, to imagine the future. When he was thirty, Carnegie resigned from the railway company. He had fortune enough now to be able to plan his own schemes. He saw the immense possibilities of railway development in the vast American continent, and he saw also the great opportunity which this gave to the metal industry that

supplied the rails. With boundless enthusiasm he became an ironmaster.

The enormous growth of railways, with the opening up of the prairies of the vast Wild West was the most dramatic phase of America's history. During and after the Civil War, tens of thousands of railway lines carried new settlers further and further west and created what was almost a new continent. For fifty years after the Civil War, half the iron and steel produced in the United States was used by the railroads. Carnegie saw no end to the growth of transport, and he meant to be ready. At first he built iron bridges and rails, but it was not long before his imagination and energy were turned in another direction. On one of his voyages to England he met Henry Bessemer, who had just perfected a new method of making steel: a converter which could transform iron into steel on animmense scale and at less cost. When Carnegie saw the converter working, he was fired with enthusiasm. All he had done before seemed wasted. Gone were all his visions of retirement and a peaceful life. "The day of iron has passed," he shouted to his bewildered friends. "Steel is King!

The rise of the steel industry was one of the great romances of the later nineteenth century. The almost magical growth of railways would never have been possible without the new, strong, durable, cheap steel rails. The modern express train would have crushed the old rails to powder. Transport became cheap.

Carnegie's dream of the future of steel was more than fulfilled. Under his guidance steel, from being the "hothouse plant" of America, developed into the hardiest of growths. Steel bridges, steel machinery and tools, steel warships, wire, pipe-lines, bicycles, and finally enormous steel houses or skyscrapers, all these and more brought prosperity to the new industry. On a huge proportion of

the steel used, not only in America but all over the world, was indented the name "Carnegie."

Carnegie's reign as Steel King, with his vast works in Pittsburg, his iron mines and coalfields, private railways and docks, lasted from 1875 when he began to build his first steel works until 1900 when he sold his interest in the business to his fellow-millionaire, Pierpont Morgan. During that time, he not only built up the greatest business enterprise in the world but became the world's richest man. He owed his success to several things. He had unfailing courage and imagination, and this enabled him to extend his business in times of depression, so that when trade revived he was ready to forge ahead of his competitors who had waited too long. He had also a flair for choosing his assistants; he surrounded himself with young men of great ability and he knew how to use each man's abilities to the best advantage. He never invested outside his own business, nor did he let his partners do so. The money made in steel was put back into steel. All his eggs were in one basket, but no one could have watched the basket more anxiously.

11

As America grew and prospered after the Civil War, American millionaires appeared in large numbers. If Carnegie had merely been the richest or the ablest of these, he might not have been very interesting. But there were two things about Carnegie which were very unusual, and which make his life a most interesting study. They are summed up in two of his maxims: "Enjoy life—do not be a slave to work," and again, "It is a disgrace to die rich."

Business was only half his life, and he would have said the less important half. He wanted travel, time to read and write, the leisurely life of a country squire. This he managed to achieve by leaving his business in the hands of the men he had chosen for that purpose and spending at least six months of each year, either in travel or as a laird in Scotland where he became owner of a large estate. Perhaps the greatest moment of Carnegie's life was in 1861 when, mounted with his mother and some friends on his own coach and four, he drove north to Dunfermline. The town had decreed a holiday. Banners across the streets were blazoned "Welcome, Carnegie," and the townspeople, in their Sunday best, assisted with brass bands and bagpipes, welcomed home the emigrant of nearly forty years before.

In Pittsburg and New York he was the steel magnate boss of thousands of workers in factories and mines, ruthless with his rivals, determined to get every ounce out of his employees. In Scotland he was the kindly and benevolent squire, generous to his tenants, the friend and host of Gladstone, Morley, Herbert Speneer and many other public men, the lover of nature and of literature. It is difficult to reconcile the two, and it is not surprising that Carnegic has been criticized for leaving so much of his work to be done by others.

During one of his absences, a terrible strike took place at one of his factories. It was mishandled, and perhaps if Carnegie had been on the spot, bloodshed could have been avoided. But he believed that the job of running the business was best done by his colleagues. His function was to think things out, to create and plan. For this he said he needed quiet and leisure, and the contact of cultured minds. Work never became his master. He made money to enjoy life.

But there was another and much deeper purpose behind Carnegie's money-making. When he died, there was found among his papers a little yellowed sheet covered with his own writing. It was a kind of plan for his life which he had written at the age of thirty-three, just when he first realized that he was going to be a very rich man. This is how it begins: "By this time two years I can arrange all my business as to secure at least 50,000 dollars per annum. Beyond this, never earn, make no effort to increase fortune, but spend the surplus each year for benevolent purposes." The young Carnegie went on to say that he intended to retire at thirty-five, to settle in England and improve his education, to devote himself to public affairs, especially those connected with education and the poorer classes. He determined never to give way to the worship of money.

In later years Carnegie often read over this little document. He never forgot the ideal he had set before him. In his writings and conversation, he constantly declared that he would consider it "disgraceful to die a rich man." He believed that a rich man's life should be divided into two parts, the first making money, and the second giving it away. This task of giving money away he believed to be as difficult and as important as making it. Many laughed at him, but to all his critics he answered, "Wait and see."

In 1900 Carnegie retired. He wrote down on a piece of paper the price he wanted for his business. The paper was taken to his fellow millionaire, Mr. Pierpont Morgan, who looked at it and said, "I accept." The price was £80,000,000, the biggest business deal ever made.

Then for nearly twenty years Carnegie gave his money away. "After a time," he wrote to a friend at the time of his retirement, "I shall become a wiser and more useful man." Those were brave words for an old man, and it is probably true that the last years of his long life were the happiest and most useful. Carnegie had strong views about the best way to use his money. He fought against ignorance, which he believed to be the root of all evil. He preferred to finance scientific research rather than

hospitals, and libraries, universities and schools rather than other forms of social work.

To any town in the United States or the British Isles that asked for one and promised to support it, he gave a public library. By the Carnegie Trust for the Scottish Universities he endowed Scottish education for ever, providing for research and the payment of fees for poor students. In America he founded the Carnegie Institution for scientific research, built the Mt. Wilson Observatory, and helped every kind of scientific study. His love of music made him enjoy providing organs where they were badly needed. Finally he formed the Carnegie Corporation both in America and in Great Britain, leaving a huge income in the control of trustees, to be spent year by year on the purposes he specially intended, education, libraries, organs, the work of peace, scientific research, pensions for public men, and many others.

Carnegie lived through the First World War. His active mind, at that time and for many years before, had been working on the idea of a "League of Peace", and in 1910 he gave a large endowment for "International Peace". Carnegie introduced this in words which may seem far-fetched but which were sincere—"Let my Trustees ask themselves from time to time, from age to age, how they can best help man in his glorious ascent onward and upward, and to this end devote this fund." In 1919 at the age of eighty-four, Andrew Carnegie died, and it was found that he had in his lifetime given away

ninety per cent of his millions.

There was in this little, coeksure, talkative Seotchman an element of greatness. He was a tremendous personality, full of imagination and freshness of outlook. "He is an idealist", said his friend John Morley, "who lives and works with his ideals, and drudges over them every day of his life." Perhaps his optimism carried him too far. Although

he called himself a radical and a democrat, he lived his life apart from the mass of the workers on whose skill and pluck he depended. He was not really one of the people. He was separated not so much by his money as by the fact that he did not share their struggles and dangers. But the real greatness of Carnegie lies in his ideals. After Carnegie's example had staggered the business world, a great change took place in the attitude of many very rich business men. We have only to think of Rockefeller, Lord Nuffield and others to realize how closely they have followed Carnegie in their desire to avoid "the disgrace of dying rich". His "Gospel of Wealth" has profoundly influenced the modern world.

In a letter to him from a friend, this is plainly put: "I estimate the value of your life not so much by the wealth you have attained, or even the distribution of it, as in the fact that the whole sentiment of mankind will be affected by the principles which you have laid down and which you are putting into practice. It seems to me that your position in the history of social development will be that of the man who first compelled wealth to recognize its duties, not merely as a matter of moral obligation but of a decent self-respect on the part of men who control large fortunes."

E. H. CARTER

« 23 »

MARIE CURIE

Discoverer of Radium

In the summer of 1871 a family of Polish children, a boy and four girls, stayed with their parents, M. and Mme. Sklodovska, on a farm belonging to their cousins. They made mud pies and climbed trees, in whose branches they kept stores of gooseberries, cherries and raw carrots wrapped in cabbage leaves. But the long summer days could not be given only to play. Bronya, aged seven, was learning to read. Tired of arranging and re-arranging her cardboard letters by herself, she would sometimes get her little sister Marya to be her pupil in a game of school. Marya was only four, but she liked this new game and played it as earnestly as she did everything else.

One day she was in the room when Bronya was having a reading lesson with her mother and father. Bronya was not a stupid child, but at seven years old she was not much interested in reading. She stumbled over the words of her reading-book. Suddenly little Marya took the book out of her hands and read the first sentence without a mistake. When she looked up excitedly from the book, her mother and father gazed at her in silent astonishment. They were afraid their baby was going to be precocious and conceited. Bronya too, instead of being proud of her pupil, was looking at her with a sulky stare on her fair dimpled face. Poor Marya began to cry, "Pardon, pardon," she sobbed, "I didn't do it on purpose. It's not my fault, it's not Bronya's fault! It's only because it was so easy!"

Fifty years later Marya was elected a member of the Academy of Medicine in Paris. When the President of the Academy welcomed her, he said, "We salute in you a great scientist, a great-hearted woman who has lived only through devotion to work... a patriot who, in war as in peace, has always done more than your duty."

Between the time when she learnt to read and the day when, as Mme. Marie Curie, she became a member of the French Academy of Medicine, Marya Sklodovska's life was full of sadness, but also of wonderful adventure. Until the year 1918 her country, Poland, did not regain its independence. It had been partitioned three times by the end of the eighteenth century and Warsaw, where her parents lived, was ruled by the Czar of Russia. Her father was a schoolmaster, but he was not free to teach as he liked. In one wing of the school lived a Russian inspector who would report him if he taught his boys to love their country or to use their own Polish language.

When Marya was ten years old she herself went to school. Her class teacher was a Pole, and taught the children Polish history in Polish. If a bell in the corridor warned them that an inspector had come, the Polish books had quickly to be cleared and Marya, as the surest child in the class, would be chosen to answer questions about Russia, to give the titles of the Czar and the names

of the Imperial family.

Without a single mistake she played her part, but when the inspector had gone and her teacher kissed her, she burst into tears. Two years later her father was turned out of his house in the school buildings and had to move with his delicate wife and his son and little daughters from their pleasant home into a much smaller house. He had less money and had to take schoolboys to board with him. The little girls had to sleep and work in the dining-room. Soon their mother died, and they were left to the care of a housekeeper and of their father in such time as he could spare from his work.

When she was fourteen Marya went to the Gymnasium or, as we should say, Grammar School. There she was the brightest of all the girls, and when she left at the age of sixteen she won the school gold medal. She and her sister Bronya both longed to go to Paris to study at the University, but there was no money to pay for this. Marya decided that she would take a post as a governess and save every penny she could so that she might help Bronya to go.

In the quiet village where she was teaching, Marya found peasant children who could neither read nor write. In her spare time she opened a little class for them in her bare room. At first ten, then as many as eighteen, tow-haired children used to come in by a back door and shuffle with their bare feet up the carpetless stair. Round the scrubbed deal table, seven or eight at a time, they struggled to learn to read and write in Polish. If their young teacher had been discovered by the Russian inspectors, she would have been sent to prison in Siberia.

All this time Marya herself was dreaming of the day when she might perhaps be able to join Bronya in Paris and begin her own studies once more. At last in 1890 a letter came from Bronya. She had nearly finished qualifying as a doctor. She was engaged and hoping to be married to a young man who was also about to beome a doctor. Marya must save up and next year come to Paris and begin her studies, and live with her sister and brother-in-law. But family duties caused her to turn her back on the wonderful suggestion. For more than a year she lived with her father in Warsaw, giving lessons. At the end of a courtyard planted with lilacs was a tiny building. Over the door hung the name "The Museum of Industry and Agriculture." It was directed by one of Marya's cousins.

Inside were test-tubes, balances and electrometers. There, by herself in the evenings, Marya began to make experiments in science. She knew she had found the work she really wanted to do. Now she must go to Paris.

She packed up her mattress, her sheets and towels. In the big brown wooden trunk with M. S. painted on the lid, she packed her stout linen underclothes, her dark dresses, her shoes, her two hats. On the station she flung her arms round her father. "I shall not be away long," she cried; "two years, three years at the longest. As soon as I have finished my studies, and passed a few examinations, I'll come back and we shall live together and never be separated again." "Yes, my little Manyusya," murmured her father a little sadly. "Come back quickly. Work hard. Good luck."

It was a wonderful moment to Marya when she at last stood in the streets of Paris. For the first time in her life she was amongst people who could talk freely the language they wanted to speak. The bookstalls too were free to sell books in any language and on any subject. There were no secret police, no inspectors to punish the teachers and students of Paris if they spoke French or learnt the history of France. For a little while she lived with her sister and brother-in-law, but the fun and festivities in their house in the evenings gave her too little time for her work.

She moved into an attic by herself. Marya, or Marie as her French companions called her, did all her own cooking and cleaning. Often she had hardly anything to eat. Sometimes she fainted because she was so tired and hungry. So she lived for four years. She won a scholarship which helped her to go on paying her fees and her rent. She sat for her Master's degree in science (M.Sc.) and came out first of the thirty candidates.

Then one day, at tea in the house of a friend, she met a tall young man, one of the cleverest French scientists

of the day. His name was Pierre Curie. They began to work together and to see each other often. Pierre asked Marie to be his wife. For a long time she refused. She could not bear never to live in Poland again with her father. At last in the summer of 1895, she could refuse him no longer. They were married and spent their honeymoon exploring France on their bicycles. They took a little flat. Marie cooked and shopped in the early morning. Then she went to the University and worked for eight hours at her scientific experiments.

11

Soon she and Pierre planned that she must take her doctor's degree. For this she must write a long essay on some scientifie discovery which she herself had made. She had read of the work of a great Frenchman, M. Henri Beequerel. He had discovered that a metal containing an element called uranium, if wrapped in black paper, would make a mark through the paper on a photographic plate. If it was in the same room with an instrument for measuring the presence of electricity, it would make it move without any other conductor than the air. Nobody knew what it was in the uranium which did these wonderful things. Marie and Pierre were fascinated by it. Marie determined to try to find out and to write about it for her doctorate.

There was nowhere for her to work but a damp shed which was used as a lumber room. Here she had to set up her scientific instruments. The damp and the bitter winter cold were very bad for the instruments and for Marie. By and by she began to wonder whether these mysterious rays were only to be found in uranium. She soon found that they were present in another element, thorium. Next she realized that the radio activity, as she called the action of the rays, was much stronger than

she had expected. There was not enough uranium or thorium in her specimens to cause such strong reaction. She made a wonderful guess. Could there possibly be a radio-active element in her minerals which no one had ever discovered before?

At every point Pierre advised and helped her. Soon they were sure that the new element existed. They called it radium, but they still had to find it. They knew it would be found, if anywhere, in an ore called pitch-blende which was used in Bohemia for the making of glass. The glass-makers needed the uranium in the pitch-blende for their manufacture. When they had extracted it, the rest was thrown out on to a slag-heap. The Curies could not have afforded to buy pitch-blende with the precious uranium in it, but they could afford tons of this waste matter from the glass factory. They ordered it. One morning a heavy wagon drew up outside their working shed. Sacks were unloaded. Marie in excitement cut the strings and plunged in her hands. Here at last was the material she wanted for her experiment, dull and brown and full of pine-needles from the forests of Bohemia.

Now Pierre and Marie set to work in their miserable shed. For four years, from 1898 to 1902, Marie in her smoke-stained working smock stood in the court-yard, melting down the metal, surrounded by bitter smoke. Pierre in the shed was busy with other experiments. As weeks and months passed and the radium was still not found, Pierre urged Marie to give up her exhausting search. But it was not in Marie's nature ever to give up. Day by day she got nearer to her result. One night she and Pierre returned home to their flat feeling restless. They knew their discovery was nearly made. Marie bathed her baby Irène, put her to bed, and sat brooding over the cradle for a while. Then she went down to Pierre and picked up the pinafore she was making for Irène, but she could not settle

to it. Suddenly she got up. "Suppose we go down there for a moment?" she said.

Pierre knew at once what she meant. Arm in arm they walked almost silently through the dark streets. When they came to the door of the shed, Pierre put the key in the lock. Inside, they knew their little glass tubes were waiting, standing in rows on rough shelves. Would anything new have happened since they left the shed? The door squeaked as Pierre pushed it open. "Do not light the lamp," whispered Marie as they slipped inside. There, there it was, shimmering in the darkness from the little test-tubes, a lovely, mysterious, phosphorescent light. Radium was found.

Up to this time many scientists had not believed in the existence of radium. Now that Marie could take them into an unlighted shed and show them her new element. shining like a glow-worm in the dark, they were convinced. Soon surprising discoveries were made about what radium could do. Its rays could go through any substance except a thick screen of lead. It could give off enough heat in an hour to melt its own weight in ice. It coloured the glass receivers in which it was contained, and little by little reduced to powder any paper or cotton wool in which it was wrapped. At length, most wonderful of all, certain German and French doctors discovered that the burning properties of radium could help them in the cure of certain kinds of deadly disease. If Pierre and Marie Curie had chosen to claim that the discovery of radium gave them alone the right to produce it or to have it produced, they might have become very rich. But this they would not do.

And now at last in 1903, Mme. Curic had time to collect the results of her work and present herself for the doctor's degree. After that, for three years she and her husband worked together. Then one wet day in the streets of Paris, Pierre Curic was knocked down by a heavy

dray and killed. Marie worked on alone. She could not bear anyone to see her grief, but her face was worn, her fine hands twitched. But by now she had become famous. She could not escape from the people who admired her.

The Universities of Europe gave her honours. Sweden presented her with the Nobel Prize for Chemistry, one of the greatest honours a scientist can receive. In Paris two great scientific societies decided to join together to build her a beautiful laboratory to be called the *Institute of Radium*. In one wing Mme. Curie could work with her assistants and pupils. In another close by, doctors could experiment in and practise the cure of disease with radium. And so wonderful days began again for Marie. Before the foundations of her laboratory were finished, she had begun to make the garden. She chose plane trees and lime trees. She planted rambler roses and watered them every day.

In July 1914 the new building was finished. Marie's wing was called the Pavillon Curie. The road which led to it was called the Rue Pierre Curie. The sun streamed in through the great windows. The benches and cupboards, the scientific instruments were all in place.

On 2nd August, 1914, Germany invaded Belgium, and France was plunged into war. There was no possibility of working quietly with her students in Paris. But almost at once Madame Curie knew what she would do. Even before the discovery of radium, it had been found that those other rays, which scientists call X-rays, can pass through the skin and flesh of the human body and enable doctors to take photographs of the muscle and bones. Now was the moment when X-ray photography was specially needed. With its help, surgeons could see where bullets and shrapnel had buried themselves in wounded men. This would make operation and cure much easier. But French military hospitals had no X-ray departments. Mme.

Curie collected all the X-ray apparatus she could. She equipped a car and was soon ready to drive to the base hospitals all over France, to take the X-ray photographs herself, and to find a room in hospitals suitable for a permanent X-ray department.

Before the end of the war she had equipped two hundred of these rooms, and more than a million French soldiers had been treated in them. She helped in the same work for the Belgian and Italian armies. In November 1918 came the end of the war, and by the peace treaty Poland once more became a free country. Four times in the following years Mme. Curie visited her old home. She went not only to see her brother and sisters once more, but to help to raise money to build an Institute of Radium in Warsaw. Poland was a very poor country. It took several years to collect the money. Mme. Curie even travelled to America to ask friends there to help her. At last on 29th May, 1932, she returned, for the last time, to the city where she was born for the ceremonial opening of the Radium Institute of Warsaw. Two years later she died.

"Marie Curie is, of all celebrated beings, the only one whom fame has not corrupted," was the tribute of another great scientist.

E. H. CARTER

THE BISHOP'S CANDLESTICKS

A Play in One Act

by NORMAN MCKINNEL

(Founded on an incident in Victor Hugo's novel Les Misérables.)

CHARACTERS

THE BISHOP
THE CONVICT
PERSOMÉ, the Bishop's sister, a widow
MARIE
SERGEANT OF GENDARMES

TIME: The beginning of last century.

PLACE: France, about thirty miles from Paris.

scene: The kitchen of the bishop's cottage. It is plainly bu substantially furnished. Doors R. and L. and L.C. Window R.C. Fireplace with heavy mantelpiece down R. Oak settle with cushions behind door L.C. Table in window R.C. with writing materials and crucifix (wood). Eight-day clock R. of window. Kitchen dresser with cupboard to lock down L. Oak dining table R.C. Chairs, books, etc. Winter wood scene without. On the mantelpiece are two very handsome candlesticks which look strangely out of place with their surroundings.

MARIE and PERSOMÉ discovered. MARIE stirring some soup on the fire. PERSOMÉ laying the cloth, etc.

PERSOMÉ: Marie, isn't the soup boiling yet?

MARIE: Not yet, madam.

PERSOMÉ: Well it ought to be. You haven't tended the fire properly, child.

MARIE: But madam, you yourself made the fire up.

PERSOMÉ: Don't answer me back like that. It is rude.

MARIE: Yes, madam.

PERSOMÉ: Then don't let me have to rebuke you again. MARIE: No, madam.

PERSOMÉ: I wonder where my brother can be. It is after eleven o'clock [looking at the clock] and no sign of him. Marie!

MARIE: Yes, madam.

PERSOMÉ: Did Monseigneur the Bishop leave any message for me?

MARIE: No, madam.

PERSOMÉ: Did he tell you where he was going?

MARIE: Yes, madam.

PERSOMÉ: "Yes, madam" [imitating]. Then why haven't you told me, stupid!

MARIE: Madam didn't ask me.

PERSOMÉ: But that is no reason for your not telling me, is it?

MARIE: Madam said only this morning I was not to chatter, so I thought—

PERSOMÉ: Ah, mon Dieu, you thought! Ah! It is hopeless.

MARIE: Yes, madam.

PERSOME: Don't keep saying "Yes, Madam," like a parrot, nincompoop.

MARIE: No, madam.

PERSOMÉ: Well. Where did monseigneur say he was going?

MARIE: To my mother's, madam.

PERSOMÉ: To your mother's indeed! And why, pray?

MARIE: Monseigneur asked me how she was, and I told

him she was feeling poorly.

PERSOMÉ: You told him she was feeling poorly, did you? And so my brother is to be kept out of his bed, and go without his supper because you told him she was feeling poorly. There's gratitude for you!

MARIE: Madam, the soup is boiling!

PERSOMÉ: Then pour it out, fool, and don't chatter. [MARIE about to do so]. No, no. Not like that; here, let me do it, and do you put the salt-cellars on the table-the silver ones.

MARIE: The silver ones, madam?

PERSOMÉ: Yes, the silver ones. Are you deaf as well as stupid?

MARIE: They are sold, madam.

PERSOMÉ: Sold! [With horror] Sold! Are you mad? Who

sold them? Why were they sold?

MARIE: Monseigneur the Bishop told me this afternoon while you were out to take them to Monsieur Gervais who has often admired them, and sell them for as much as I could.

PERSOMÉ: But you had no right to do so without asking me.

MARIE: But, madam, Monseigneur the Bishop told me [with awe].

PERSOMÉ: Monseigneur the Bishop is a-ahem! But, but

what can he have wanted with the money?

MARIE: Pardon, madam, but I think it was for Mère Gringoire.

PERSOMÉ: Mère Gringoire indeed! Mère Gringoire! What, the old witch who lives at the top of the hill, and who says she is bedridden because she is too lazy to do any work? And what did Mère Gringoire want with the money, pray?

MARIE: Madam, it was for the rent. The bailiff would

not wait any longer and threatened to turn her out today if it were not paid, so she sent little Jean to monseigneur to ask for help and——

PERSOMÉ: Oh, mon Dieu! It is hopeless, hopeless. We shall have nothing lest. His estate is sold, his savings have gone. His furniture, everything. Were it not for my little dot we should starve, and now my beautiful—beautiful [sob] salt-cellars. Ah, it is too much, too much. [She breaks down crying.]

MARIE: Madam, I am sorry, if I had known-

PERSOMÉ: Sorry, and why pray? If Monseigneur the Bishop chooses to sell his salt-cellars he may do so, I suppose. Go and wash your hands, they are disgracefully dirty.

MARIE: Yes, madam [going towards R.].

[Enter the misnop, C.

BISHOP: Ah, how nice and warm it is in here! It is worth going out in the cold for the sake of the comfort of coming in. [PERSOMÉ has hastened to help him off with his coat, etc. MARIE has dropped a deep curty.] Thank you, dear [looking at her]. Why, what is the matter? You have been crying. Has Marie been troublesome, ch? [Shaking his finger at her] Ah!

PERSOMÉ: No, it wasn't Marie—but, but—

BISHOP: Well, well, you shall tell me presently. Marie, my child, run home now, your mother is better, I have prayed with her and the doctor has been. Run home! [MARIE putting on cloak and going.] And, Marie, let yourself in quietly in case your mother is asleep.

MARIE: Oh, thanks, monseigneur.

[She goes to door C., as it opens the snow drives in. BISHOP: Here, Marie, take my comforter, it will keep you warm. It is very cold tonight.

MARIE: Oh, no, monseigneur [shamefacedly]!

PERSOMÉ: What nonsense, brother, she is young, she won't hurt.

nishop: Ah, Persomé, you have not been out, you don't know how cold it has become. Here, Marie, let me put it on for you. [Does so] There! Run along, little one.

[Exit MARIE, C.

PERSOMÉ: Brother, I have no patience with you. There, sit down and take your soup, it has been waiting ever so long. And if it is spoilt it serves you right.

BISHOP: It smells delicious.

PERSOMÉ: I'm sure Marie's mother is not so ill that you need have stayed out on such a night as this. I believe those people pretend to be ill just to have the Bishop call on them. They have no thought of the Bishop!

BISHOP: It is kind of them to want to see me.

PERSOME: Well for my part I believe that charity begins at home.

BISHOP: And so you make me this delicious soup. You

are very good to me, sister.

PERSOMÉ: Good to you, yes! I should think so. I should like to know where you would be without me to look after you. The dupe of every idle scamp or lying old woman in the parish.

BISHOP: If people lie to me they are poorer, not I.

PERSOME: But it is ridiculous, you will soon have nothing left. You give away everything, everything!!!

BISHOP: My dear, there is so much suffering in the

world, and I can do so little [sighs], so very little.

PERSOMÉ: Suffering, yes, but you never think of the suffering you cause to those who love you best, the suffering you cause to me.

BISHOP [rising]: You, sister dear? Have I hurt you? Ah, I remember you had been crying. Was it my fault? I didn't mean to hurt you. I am sorry.

PERSOMÉ: Sorry. Yes. Sorry won't mend it. Humph! Oh, do go on eating your soup before it gets cold.

BISHOP: Very well, dear. [Sits] But tell me-

PERSOMÉ: You are like a child, I can't trust you out of my sight. No sooner is my back turned than you get that little minx Marie to sell the silver salt-cellars.

BISHOP: Ah, yes, the salt-cellars. It is a pity. You, you were proud of them?

PERSOMÉ: Proud of them, why they have been in our family for years.

BISHOP: Yes, it is a pity, they were beautiful, but still, dear, one can eat salt out of china just as well.

PERSOMÉ: Yes, or meat off the floor, I suppose. Oh, it's coming to that. And as for that old wretch Mère Gringoire, I wonder she had the audacity to send here again. The last time I saw her I gave her such a talking to that it ought to have had some effect.

BISHOP: Yes! I offered to take her in here for a day or two, but she seemed to think it might distress you.

PERSOMÉ: Distress me!!!

BISHOP: And the bailiff, who is a very just man, would not wait longer for the rent, so—so—you see I had to pay it. PERSOMÉ: You had to pay it. [Gesture of comic despair.]

BISHOP: Yes, and you see I had no money so I had to dispose of the salt-cellars. It was fortunate I had them, wasn't it. [Smiling] But I'm sorry I have grieved you.

PERSOMÉ: Oh, go on! go on! You are incorrigible. You'll sell your candlesticks next.

BISHOP [with real concern]: No, no, sister, not my candlesticks.

PERSOMÉ: Oh? Why not? They would pay somebody's rent, I suppose.

BISHOP: Ah, you are good, sister, to think of that, but, but I don't want to sell them. You see, dear, my mother gave them to me on—on her death-bed just after you were born, and—and she asked me to keep them in remembrance of her, so I would like to keep them, but perhaps it is a sin to set such store by them?

PERSOMÉ: Brother, brother, you will break my heart [with tears in her voice]. There! don't say anything more. Kiss me and give me your blessing. I'm going to bed. [They kiss.]

(BISHOP making sign of the Cross and murmuring blessing. [PERSOMÉ locks cupboard door and turns to go.

PERSOMÉ: Don't sit up too long and tire your eyes.

BISHOP: No, dear! Goodnight! [PERSOMÉ exits R. BISHOP [comes to table and opens a book, then looks up at the candlesticks]: They would pay somebody's rent. It was kind of her to think of that.

THe stirs the fire, trims the lamb, arranges some books and papers, sits down, is restless, shivers slightly, clock outside strikes twelve, and he settles to read. Music during this. Enter the CONVICT stealthily, he has a long knife and seizes the BISHOP from behind.

CONVICT: If you call out, you are a dead man!

BISHOP: But, my friend, as you see, I am reading. Why should I call out? Can I help you in any way?

CONVICT [hoarsely]: I want food. I'm starving. I haven't eaten anything for three days. Give me food quickly, quickly, curse you.

BISHOP [eagerly]: But certainly, my son, you shall have

food. I will ask my sister for the keys of the cupboard.

 $\lceil Rising.$

CONVICT: Sit down!!! [The BISHOP sits, smiling.] None of that, my friend! I'm too old a bird to be caught with chaff. You would ask your sister for the keys, would you? A likely story! You would rouse the house too. Eh? Ha! ha! A good joke truly. Come, where is the food. I want no keys. I have a wolf inside me tearing at my entrails, tearing me; quick, tell me where the food is.

BISHOP [aside]: I wish Persomé would not lock the cupboard. [Aloud] Come, my friend, you have nothing to fear.

My sister and I are alone here.

CONVICT: How do I know that? BISHOP: Why, I have just told you.

[CONVICT looks long at the BISHOP.

CONVICT: Humph! I'll risk it. [BISHOP, going to door R.] But mind! Play me false and as sure as there are devils in hell I'll drive my knife through your heart. I have nothing to lose.

BISHOP: You have your soul to lose, my son, it is of more value than my heart. [At door R. calling] Persomé! Persomé!

[The CONVICT stands behind him with his knife ready.

PERSOMÉ [within]: Yes, brother.

BISHOP: Here is a poor traveller who is hungry. If you are not undressed will you come and open the cupboard and I will give him some supper.

PERSOMÉ [within]: What, at this time of night? A pretty business truly. Are we to have no sleep now, but to be at the beck and call of every ne'er-do-well who happens to pass?

візнор: But, Persomé, the traveller is hungry.

PERSOMÉ: Oh, very well, I am coming. PERSOMÉ enters R. Sees the knife in the CONVICT's hand] [Frightened] Brother, what is he doing with that knife?

BISHOP: The knife, oh, well, you see, dear, perhaps he may have thought that I—I had sold ours. [Laughs gently].

PERSOMÉ: Brother, I am frightened. He glares at us like a wild beast [aside to him].

convict: Hurry, I tell you. Give me food or I'll stick my knife in you both and help myself.

BISHOP: Give me the keys, Persomé. [She gives them to him] And now, dear, you may go to bed.

PERSOMÉ [going: The CONVICT springs in front of her.] convict: Stop! Neither of you leave this room till I do.

[She looks at the BISHOP.

BISHOP: Persomé, will you favour this gentleman with your company at supper? He evidently desires it.

PERSOMÉ: Very well, brother.

[She sits down at table staring at the two.

BISHOP: Here is some cold pie and a bottle of wine and some bread.

CONVICT: Put them on the table, and stand below it so that I can see you.

[BISHOP does so and opens drawer in table, taking out knife and fork, looking at the knife in CONVICT'S hand.

CONVICT: My knife is sharp. [He runs his finger along the edge and looks at them meaningly.] And as for forks [taking it up] faugh! steel. [He throws it away] We don't use forks in prison.

PERSOMÉ: Prison?

CONVICT [cutting off an enormous slice, which he tears with his fingers like an animal, then starts]: What was that? [He looks at the door.] Why the devil do you leave the window unshuttered and the door unbarred so that anyone can come in [shutting them]?

BISHOP: That is why they are left open.

CONVICT: Well, they are shut now!

BISHOP [sighs]: For the first time in thirty years.

[CONVICT eats voraciously and throws a bone on the floor.

PERSOMÉ: Oh, my nice clean floor!

[BISHOP picks up the bone and puts it on plate.

convicr: You're not afraid of thieves?

BISHOP: I am sorry for them.

convict: Sorry for them. Ha! ha! [Drinks from bottle.] That's a good one. Sorry for them. Ha! ha! ha! [Drinks.] [Suddenly] What the devil are you?

BISHOP: I am a bishop.

convict: Ha! ha! ha! A bishop. Holy Virgin, a bishop. Well I'm damned!

BISHOP: I hope you may escape that, my son. Persomé, you may leave us, this gentleman will excuse you.

PERSOMÉ: Leave you with-

BISHOP: Please! My friend and I can talk more—freely then.

[By this time, owing to his starving condition, the wine has affected the CONVICT.

convict: What's that? Leave us. Yes, yes, leave us. Goodnight. I want to talk to the Bishop. The Bishop. Ha! ha! [laughs as he drinks and coughs].

візнор: Goodnight, Persomé.

[He holds the door open and she goes out R., holding in her skirts as she passes the CONVICT.

CONVICT [chuckling to himself]: The Bishop. Ha! ha! Well I'm— [Suddenly very loudly] D'you know what I am? BISHOP: I think one who has suffered much.

convict: Suffered [puzzled] suffered? My God, yes. [Drinks] But that's a long time ago. Ha! ha! That was when I was a man, now I'm not a man; now I'm a number: number 15729, and I've lived in hell for ten years.

BISHOP: Tell me about it-about hell.

CONVICT: Why? [Suspiciously.] Do you want to tell the police—to set them on my track?

BISHOP: No! I will not tell the police.

CONVICT [looks at him earnestly]: I believe you [scratching his head], but damn me if I know why.

BISHOP [laying his hand on the CONVICT'S arm]: Tell me about the time—the time before you went to hell.

convict: It's so long ago I forget, but I had a little cottage, there were vines growing on it [dreamily], they looked pretty with the evening sun on them and, and—there was a woman—she was [thinking hard]—she must have been my wife—yes. [Suddenly and very rapidly] Yes, I remember! she was ill, we had no food. I could get no

work, it was a bad year, and my wife, my Jeanette, was ill, dying, [pause] so I stole to buy her food. [Long pause. The BISHOP gently pats his hand.] They caught me. I pleaded to them, I told them why I stole, but they laughed at me, and I was sentenced to ten years in the prison hulks, [pause] ten years in hell. The night I was sentenced the gaoler told me—told me Jeanette was dead. [Sobs with fury] Ah, damn them, damn them. God curse them all.

[He sinks on the table sobbing. BISHOP: Now tell me about the prison-ship, about hell. CONVICT: Tell you about it? Look here, I was a man once. I'm a beast now, and they made me what I am. They chained me up like a wild animal, they lashed me like a hound. I fed on filth, I was covered with vermin, I slept on boards and I complained. Then they lashed me again. For ten years, ten years. Oh God! They took away my name, they took away my soul, and they gave me a devil in its place. But one day they were careless, one day they forgot to chain up their wild beast, and he escaped. He was free. That was six weeks ago. I was free, free to starve.

BISHOP: To starve?

CONVICT: Yes, to starve. They feed you in hell, but when you escape from it you starve. They were hunting me everywhere and I had no passport, no name. So I stole again, I stole these rags, I stole my food daily, I slept in the woods, in barns, anywhere. I dare not ask for work, I dare not go into a town to beg, so I stole, and they have made me what I am, they have made me a thief. God curse them all.

[Empties the bottle and throws it into the fireplace R., smashing it.

BISHOP: My son, you have suffered much, but there is hope for all.

CONVICT: Hope! Hope! Ha! ha! [Laughs wildly.]

BISHOP: You have walked far, you are tired. Lie down and sleep on the couch there, and I will get you some coverings.

convict: And if anyone comes?

BISHOP: No one will come, but if they do, are you not my friend?

CONVICT: Your friend [puzzled]?

BISHOP: They will not molest the Bishop's friend.

CONVICT: The Bishop's friend.

[Scratching his head, utterly puzzled.

BISHOP: I will get the coverings. [Exit L. CONVICT [looks after him, scratches his head]: The Bishop's friend! [He goes to fire to warm himself and notices the candlesticks. He looks round to see if he is alone, and takes them down, weighing them.] Silver, by God, and heavy. What a prize!

[He hears the bishop coming, and in his haste drops one candlestick on the table. [Enter the bishop.

BISHOP [sees what is going on, but goes to the settle up L. with coverings]: Ah, you are admiring my candlesticks. I am proud of them. They were a gift from my mother. A little too handsome for this poor cottage perhaps, but all I have to remind me of her. Your bed is ready. Will you lie down now?

convict: Yes, yes, I'll lie down now. [Puzzled] Look here, why the devil are you—ki-kind to me? [Suspiciously] What do you want? Eh?

BISHOP: I want you to have a good sleep, my friend.

convict: I believe you want to convert me; save my soul, don't you call it? Well it's no good, see? I don't want any damned religion, and as for the Church, bah! I hate the Church.

BISHOP: That is a pity, my son, as the Church does not hate you.

CONVICT: You are going to try to convert me. Oh, ha! ha! that's a good idea. Ha! ha! ha! No, no,

Monseigneur the Bishop. I don't want any of your Faith, Hope and Charity, see? So anything you do for me you're doing to the devil, understand [defiantly]?

BISHOP: One must do a great deal for the devil, in order

to do a little for God.

CONVICT [angrily]: I don't want any damned religion, I tell vou.

BISHOP: Won't you lie down now, it is late?

CONVICT [grumbling]: Well all right, but I won't be preached at, I-I- [On couch] You're sure no one will come?

BISHOP: I don't think they will, but if they do-you

yourself have locked the door.

CONVICT: Humph! I wonder if it's safe. [He goes to the door and tries it, then turns and sees the BISHOP holding the covering, annoyed Here! you go to bed. I'll cover myself. [The BISHOP hesitates.] Go on, I tell you.

[Exit L. BISHOP: Goodnight, my son.

[CONVICT waits till he is off, then tries the BISHOP's door. CONVICT: No lock of course. Curse it. [Looks round and sees the candlesticks again] Humph! I'll have another look at them. [He takes them up and toys with them.] Worth hundreds I'll warrant. If I had these turned into money they'd start mc fair. Humph! The old boy's fond of them too, said his mother gave him them. His mother, yes. They didn't think of my mother when they sent me to hell. He was kind to me too-but what's a bishop for except to be kind to you? Here, cheer up, my hearty, you're getting soft. God! wouldn't my chain-mates laugh to see 15729 hesitating about collaring the plunder because he felt good. Good! Ha! ha! Oh my God! Good! Ha! ha! 15729 getting soft. That's a good one. Ha! ha! No, I'll take his candlesticks and go, if I stay here he'll preach at me in the morning and I'll get soft. Damn him and his preaching too. Here goes!

[He takes the candlesticks, stows them in his coat, and cautiously exits L.G. As he does so the door slams.

PERSOMÉ [without]: Who's there? Who's there, I say? Am I to get no sleep tonight? Who's there, I say? [Enter R. PERSOMÉ.] I'm sure I heard the door shut. [looking round] No one here? [Knocks at the BISHOP's door L. Sees the candlesticks have gone.] The candlesticks, the candlesticks. They are gone. Brother, brother, come out. Fire, murder, thieves!

BISHOP: What is it, dear, what is it? What is the matter? PERSOMÉ: He has gone. The man with the hungry eyes has gone, and he has taken your candlesticks.

[Almost breaking down.

PERSOMÉ: Well, but go and inform the police. He can't have gone far. They will soon catch him, and you'll get the candlesticks back again. You don't deserve them, though, leaving them about with a man like that in the house.

BISHOP: You are right, Persomé. It was my fault. I led him into temptation.

PERSOMÉ: Ôh, nonsense! Led him into temptation indeed! The man is a thief, a common scoundrelly thief. I knew it the moment I saw him. Go and inform the police or I will.

[Going, but he stops her.]

BISHOP: And have him sent back to prison [very softly], sent back to hell! No, Persomé. It is a just punishment for me; I set too great store by them. It was a sin. My punishment is just, but oh God, it is hard, it is very hard.

[He buries his head in his hands.]

PERSOMÉ: No, brother, you are wrong. If you won't tell the police I will. I will not stand by and see you robbed. I know you are my brother and my bishop and

the best man in all France, but you are a fool, I tell you, a child, and I will not have your goodness abused. I shall go and inform the police [going].

BISHOP: Stop, Persomé. The candlesticks were mine, they are his now. It is better so. He has more need of them than I. My mother would have wished it so had she been

here.

PERSOMÉ: But—— [Great knocking without. sergeant [without]: Monseigneur, monseigneur, we have something for you, may we enter?

BISHOP: Enter, my son.

[Enter SERGEANT and three Gendarmes with CONVICT bound. The SERGEANT carries the candlesticks.

PERSOMÉ: Ah, so they have caught you, villain, have they?

sergeant: Yes, madam, we found this scoundred slinking along the road, and as he wouldn't give any account of himself we arrested him on suspicion. Holy Virgin, isn't he strong and didn't he struggle? While we were securing him these candlesticks fell out of his pockets. [Persomé seizes them, goes to table, and brushes them with her apron lovingly.] I remembered the candlesticks of Monseigneur the Bishop, so we brought him here that you might identify them and then we'll lock him up.

[The BISHOP and the CONVICT have been looking at each

other. The CONVICT with dogged defiance.

BISHOP: But, but I don't understand, this gentleman is my very good friend.

SERGEANT: Your friend, monseigneur!! Holy Virgin! Well!!!

BISHOP: Yes, my friend, he did me the honour to sup with me tonight and I—I have given him the candlesticks.

SERGEANT [incredulously]: You gave him, him, your candlesticks? Holy Virgin!

BISHOP [severely]: Remember, my son, that she is holy.

SERGEANT [saluting]: Pardon, monseigneur.

BISHOP: And now I think you may let your prisoner go. SERGEANT: But he won't show me his papers, he won't tell me who he is.

BISHOP: I have told you he is my friend.

SERGEANT: Yes, that's all very well, but-

BISHOP: He is your Bishop's friend, surely that is enough.

SERGEANT: Well, but-

BISHOP: Surely?

[A pause. The sergeant and the bishop look at each other.

SERGEANT: I—I—Humph! [To his men] Loose the prisoner. [They do so.] Right about turn, quick march!

[Exit SERGEANT and GENDARMES. A long pause. CONVICT [very slowly, as if in a dream]: You told them you had given me the candlesticks, given me them. By

God!

room.

PERSOMÉ [shaking her fist at him and hugging the candlesticks to her breast]: Oh, you scoundrel, you pitiful scoundrel, you come here and are fed, and warmed, and—and you thieve; steal from your benefactor. Oh, you blackguard. BISHOP: Persomé, you are overwrought. Go to your

PERSOMÉ: What, and leave you with him to be cheated again, perhaps murdered. No, I will not.

BISHOP [with slight severity]: Persomé, leave us, I wish it.

[She looks hard at him, then turns towards her door.

PERSOMÉ: Well, if I must go at least I'll take the candlesticks with me.

BISHOP [more severely]: Persomé, place the candlesticks on that table and leave us.

PERSOMÉ [defiantly]: I will not!

BISHOP [loudly and with great severity]: I, your bishop, command it.

[PERSOMÉ does so with great reluctance and exits R.

CONVICT [shamefacedly]: Monseigneur, I'm glad I didn't get away with them, curse me, I am. I'm glad.

BISHOP: Now won't you sleep here? See, your bed is

ready.

CONVICT: No! [Looking at the candlesticks.] No! no! I daren't, I daren't—besides I must go on, I must get to Paris, it is big and I—I can be lost there, they won't find me there and I must travel at night, do you understand?

BISHOP: I see—you must travel by night. convict: I—I—didn't believe there was any good in the world—one doesn't when one has been in hell, but some-how I—I know you're good and, and it's a queer thing to ask but—but could you, would you bless me before I go-I-I think it would help mc. I-

[Hangs his head very shamefacedly.

[BISHOP makes sign of the Cross and murmurs blessing. CONVICT [tries to speak, but a sob almost chokes him]: Goodnight. THe hurries towards the door.

візнор: Stay, my son, you have forgotten your property

giving him the candlestielis.

convict: You mean me—you want me to take them? BISHOP: Please, they may help you. [THE CONVICT takes the candlesticks in absolute amazement.] And, my son, there is a path through the woods at the back of this cottage which leads to Paris, it is a very lonely path, and I have noticed that my good friends the gendarmes do not like lonely paths at night. It is curious.

convict: Ah, thanks, thanks, monseigneur. I—I—[He sobs] Ah! I'm a fool, a child to cry, but somehow you have made me feel that—that it is just as if something had come into me—as if I were a man again and not a wild beast.

[The door at back is open, and the CONVICT is standing in it.

BISHOP [putting his hand on his shoulder]: Always remem-

ber, my son, that this poor body is the Temple of the Living God.

CONVICT [with great awe]: The Temple of the Living God. I'll remember.

[Exit L.C.

[The BISHOP closes the door and goes quietly to the priedieu in the window R., he sinks on his knees, and bows his head in prayer.

SLOW CURTAIN

4 25 B

THE GLOVE

JAMES DUNNE hung by his fingertips from the windowsill and after a moment dropped noiselessly to the ground. He looked about him hurrically. The house was on the outskirts of the town, well back from the road from which the grounds were separated by a high stone wall. It was almost two o'clock and the night was dark. There was little likelihood of his meeting anybody at that time. On the whole he was perfectly secure. As he ran silently across the lawn he could not help marvelling at his own nerve. He had committed burglaries in those far-off days before he had blossomed forth as a respectable jeweller in the little town of Brampton, but those days were far distant. Behind him lay ten years of law-abiding respectability. The hand that reached up to grasp the top of the wall was as steady as a rock. He could even think calmly of the still thing which had once been Richard Strong and which now lay huddled up in an ever-widening crimson pool in the room which he had just left. He had not intended to commit murder, but circumstances had rendered it inevitable. He felt that all through he had been the plaything of circumstances. His troubles had begun when an old prison acquaintance had recognized him again. Blackmail followed. Dunne's business was prosperous, but the blackmailer's everincreasing demands were a drain greater than he could bear.

He tried to supplement his resources by gambling, only to plunge more deeply into the mire, until finally ruin starcd him in the face. At his wit's end he turned to his old trade. Richard Strong was a retired solicitor, with more than a local reputation as a collector of antiques, and he was believed to possess ancient gold ornaments of fabulous value. Dunne at that time was purchasing gold, old rings, brooches and so on, and melting them down; therefore the proceeds of a burglary of Strong's house could be disposed of safely and lucratively. It was an easy matter to break into the house. He knew the room in which the collection was kept, and all that had to be done was to climb a drain-pipe for a few feet to reach a window. In Brampton it was not thought necessary to take precautions against burglars. When Dunne had stuffed his poekets with the gold ornaments, of which there were many in the room, they held a small fortune.

He was preparing to go when he heard a gasp behind him; he swung round to find that the door of the room had opened and that Strong himself was standing in front of him. "Dunne!"—it was the only word Strong uttered. Dunne had been glaneing at an oriental knife of eurious workmanship. He still held it in his hand, and almost without thinking, lunged at Strong; all was over. Dunnedragged the body into the room, closed the door, switched off the light, drew back the eurtains, and left as he had come, through the window.

He felt no remorse. "I could do nothing else," he told himself. "He recognized me, and it was that or prison." He recalled the look of surprise on Strong's face and actually smiled. He really did not think that he had anything with which to reproach himself. Strong's death was necessary for his own safety, and there was no alternative to what he had done. "In any case, he was an old man with only a few more years to live."

He felt safe. Who would suspect the dull, stodgy, middle-aged jeweller of murder and robbery? He had left

no clue. He had met nobody, either going or coming. The little main street was descrted and in complete darkness as he let himself into his house by the side-door. He lived alone in the house. A woman came in daily and "did for him", but nobody except himself slept on the premises. His bedroom was at the back, but before switching on the electric light he pulled down the blind and drew the heavy curtains across the window. Then he fumbled in his pocket and pulled out a glove. With a look of surprise he searched the pocket again, and not finding what he sought, plunged his hand into all his other pockets, fumbling amongst the gold articles with which they were filled. The latter he did not take out. For some strange reason he feared to look at them, and he did not intend to empty his pockets of them until he was ready to place them in the crucible in the little room behind the shop downstairs. Finally he abandoned the search and stood in the middle of the room, his face a white mask of sheer horror.

The other glove was missing! He had found the gloves in his pocket while in Strong's house and he had taken them out and placed them on a table before stowing away his loot. He could have sworn he had replaced them before his hasty departure, but here was the appalling fact that one of them was missing—and on the lining was his name and address! The thought of returning to the house, to the room where Strong lay so quiet and still, filled him with a kind of superstitious horror. The memory of the dead man's upturned face with the queer look of surprise frozen into perpetuity by death returned to him, and he gave a little strangled scream. He stood in the middle of the room, his face white and speckled with drops of perspiration, and his mind a welter of indecision.

"I can't do it," he muttered, "I can't . . ."
And then the vision of the scaffold intruded itself; he

shivered as with an ague, his body cold. In his criminal days he had possessed a morbid dread of the scaffold. The old fear now held him in its grip, stronger a hundred-fold than it had ever been of yore. With lagging footsteps he went out into the dark deserted street. The journey was like a nightmare. To his disordered imagination every dark corner concealed a spectre, and once he screamed hoarsely at the sight of a discarded piece of wrapping-paper which lay across his path. For a moment it had seemed to him like a corpse lying in a dark pool . . .

He reached his destination, and bathed in perspiration and trembling in every limb he climbed to the window. The room was in darkness as he had left it, but he thought he could perceive a darker object on the floor near the door. He must have light to find the glove, and the switch was near the body. Calling to his aid all the reserves of lis will-power he drew the hangings across the window and moved across the room. His feet touched something soft, and he recoiled with a hoarse gasp, his heart pounding furiously. His shaking fingers found the switch and the room was flooded with light.

Richard Strong lay at his feet. He would have given all the world to have been able to keep his gaze averted, but the body exercised some dreadful fascination over him, and drew his eyes irresistibly. More, filled with repugnance as he was, he bent forwards, his hand outstretched to touch the hilt of the knife.

"Put up your hands! Good God! Put up your hands, you scoundrel!"

He looked up with a shrill scream, the fresh shock to his overwrought nerves almost causing him to faint. The door had opened, and Strong's son stood there, covering him with a revolver. Slowly he raised his arms above his head.

The inspector who escorted Dunne to the police station was garrulous and, moreover, appeared to have temporarily forgotten that, in the eyes of the law, an accused man is innocent until he is proved guilty. At any rate, he assumed Dunne's guilt, which, considering the evidence, is not surprising.

"Do you know," he said, "that you are the last man I would have suspected? If you hadn't been found in the room with the body and the loot in your pockets we'd never have thought of you. Unluckily for you, you didn't

get away in time."

Dunne made no reply. His house was on the way to the police-station, and he asked permission to get an overcoat. The air was chilly, in that dark hour before the dawn.

"Certainly," said the inspector, "but we'll go with you."

He opened the side door and preceded his prisoner into the hall, two policemen bringing up the rear. Dunne was thinking that they intended taking no chances, when his foot touched something on the floor.

He stooped to pick it up and suddenly felt queer. Then the inspector switched on the light. Dunne looked

at the article in his hand.

It was the glove which he thought he had left in the room with the murdered man and which he had gone

"Here," shouted one of the policemen, "hold up, man!"

But Dunne slipped through his hands and fell to the floor.

R. U. JOYCE

POST HASTE

"I say, I am pleased to see you!" declared the little man standing dejectedly by the pillar-box.

"Oh, hullo!" I said, stopping. "Simpson, isn't it?"

The Simpsons were newcomers to the neighbourhood, and my wife and I had only met them once or twice.

"Yes, that's right!" returned Simpson. He seemed quite gratified by my ready recognition. "I wonder if you could lend me three-ha'penee?" I plunged an investigatory hand into my pocket. "You see, my wife gave me a letter to post, and I've just noticed it isn't stamped."

"They never are," I said, sympathetically.

"It must go tonight—it really must! And I don't suppose I should find a post-office open at this time of night, do you?"

The hour being close upon eleven, I agreed that it

seemed improbable.

"So I thought, you see, I'd get a stamp out of the machine," explained Simpson, not without pride in his ingenuity, "only I find I haven't any coppers on me."

"I'm awfully sorry, but I'm afraid I haven't, either,"

I told him, eoneluding my explorations.

"Oh, dear, dear!" he said. Just like that. He was that sort of little man.

"Perhaps somebody else-" I put forward.

"There isn't anyone else."

He looked up the street, and I looked down. Then he looked down the street, and I looked up. We both drew blank.

"Yes, well!" I said, and made to move off. But he looked so forlorn, standing there clutching a blue, unstamped envelope, that I really hadn't the heart to desert him.

"Tell you what," I said. "You'd better walk along with me to my place—it's only a couple of streets off-

and I'll try to hunt up some change for you there."

"It's really awfully good of you!" said Simpson, blinking earnestly.

At home, we managed to run the coveted threeha'pence to earth. I handed the sum to Simpson, who, in the most businesslike way, made a note of the loan in his pocket-book, and departed. I watched him take a dozen

steps up the road, hesitate, and then return to me.

"I say I am sorry to trouble you again," he said.

"The fact is, we're still quite strangers round here, and —well, I'm rather lost, to tell you the truth. Perhaps you'd direct me to the post-office?"

I did my best. I spent three solid minutes in explaining to him exactly where the post-office was. At the end of that time I felt as lost as Simpson.

"I'm-I'm afraid I don't quite-" he blinked.

"Here, I'd better come along with you," I said.
"Oh, I say, that's awfully kind of you!" he assured me. I felt inclined to agree with him. I led the way to the post-office. Simpson inserted a penny in the automatic stamp-machine. The coin passed through the machine with a hollow rattle. Its transit failed to produce the desired stamp. Simpson looked at me with a what-do-I-donow sort of expression.

"It's empty," I explained:

"Oh!" said Simpson.

Experiment revealed that the stock of ha'penny stamps was also exhausted. Simpson, in his agitation at this discovery, dropped his letter face downwards on the pavement, whence he retrieved it with the addition of a large blob of mud.

"There!" ejaculated Simpson quite petulantly. "Now it's got mud on it!" He rattled the empty machines spitefully. "Well, what can we do now?"

I gathered that I was definitely a member of the posting party.

"I suppose it must go tonight?" I said.

"Dear me, yes! My wife was most insistent about that. She said I wasn't to—— It's—well, I don't know that it's extraordinarily important, but—but I'd better post it, if you know what I mean."

I did know. Or, at least, I knew Mrs. Simpson.

"I know—I've got a book of stamps at home!" I suddenly remembered.

"We ought to have thought of that before!" said Simpson, almost severely.

"We'd better hurry, or we shall miss the post," I told him.

We hurried. It was as well we did hurry, because it took rather a long while to find the book of stamps. And it wasn't really worth finding, after all. It was empty

"How very provoking!" was Simpson's summing-up of the matter.

"Funny!" I said. "I could have sworn it was nearly full!"

"But what about my letter?" asked Simpson, dolefully "You'll have to post it unstamped, that's all," I said.

I was beginning to lose interest in Simpson's letter. "Oh, could I do that?" he asked, brightening.

"What else can you do? The other chap will have to pay double postage on it in the morning, but that can't be helped."

"I shouldn't like to do that."

"Neither should I. Still, that's his trouble. Now, hurry, or you'll miss the last collection."

Much flustered by this reminder, Simpson went on up

the street at a trot.

"Hi! The other way!' I roared after him.

"Sorry!" he panted, returning. "I-I rather think I've forgotten the way again."

I didn't even start to explain. I just took him firmly by the arm and escorted him to the post-office, in time for the midnight collection. I knew it would save me time in the end. He dropped in his letter and then, to finish my job properly, I took him home.

"I'm most awfully grateful to you, really," he assured me, earnestly, from his doorstep. "I—I can't think what I should have done without you. That letter-it's only an

invitation to dinner, to—good gracious!"
"Why, what's the matter?"

"Nothing. Just something I've remembered."

But he didn't tell me. He just goggled at me like a stricken goldfish, jerked out a "goodnight," and popped indoors.

All the way home I was wondering what it was he'd remembered.

But I stopped wondering next morning, when I had to pay the postman threepence for a blue envelope with a great muddy mark on its face.

COLIN HOWARD

THE LAUNCHING OF THE QUEEN MARY

I HAVE seen the launch of the Queen Mary. I got wet through. My only silk hat and my only morning coat are both ruined. I suspect rheumatism in my left shoulder. But I do not mind. I have seen the launch of the Queen Mary.

Long before I reached the shipyard I knew it was going to be a grand sight. I caught my first glimpse of the ship from the Great Western Road.

There she was, towering high above Clydebank, a steel town in grey and maroon paint. None of the photographs has done her justice. She was bigger than one's imagination had drawn her.

Even looking at her from that distance you felt that if she slipped sideways half Clydebank would be instantly destroyed.

Once inside the shipyard the great curved hull climbed to the sky like the side of a cathedral. In that tremendous presence we crawled about like tiny beetles. We could not believe that we should ever have the presumption to book passages in her. She seemed to have been built for bigger and better creatures than we are.

She was not only much larger than any ship we had ever seen before, but—what is more important—she was also a thing of grace, of beauty. You saw a giantess with the proportions of a nymph.

The curves of the vast prow made you glad to be alive. As you stood there looking up and wondering, you saw sheer beauty in steel. It was hard to believe that this

glorious thing had somehow been created in those dingy

higgledy-piggledy sheds.

There seemed to be no more connection between the two than there might be between a broken matchbox and a great crimson rose. There is no doubt that it is in these triumphant feats of engineering that the soul of our age expresses itself.

Here, I thought, as I looked upward, wondered and admired, is our nearest approach to the great cathedrals of the Middle Ages. Every line in this 1,000-st. long tower

of steel is purposeful and every line is beautiful.

We took up our positions on the launching platform.

Though tilted at a decided angle, the ship looked solidly fixed. Impossible to believe that any amount of button-pressing would ever make that colossal mass slide into the river.

I noticed the decorated bottle of wine hanging high above our heads ready to be swung against that grey steel wall.

I looked down from the platform and saw the 2,000 tons of coiled chains waiting to take the strain of her pull in the water. A complicated machine only a few yards away was described to me as the hydraulic press that would force her down the slipway.

Over on the other banks were stands and fields full of cars. There was a noise of a band somewhere. The tugs hooted uneasily.

Then we waited, keeping an eye on the glass-enclosed space built to receive Royalty. Having our best clothes on we all pretended to be very important, but in our hearts we knew we were nothing of the kind. This was not our day. It was the day of this beautiful steel monster, as big as a town, which they told me had now "found herself", for she had been softly groaning all night, so anxious was she to take to her natural element—the water.

It was also the day of the thousands of good folks who were pouring into the stands at each side—the men of the Clyde who had built the ship. She had suddenly come to mean a lot to us, so many mere spectators, but she meant infinitely more to them, for they had laboured at her, dreamed over her for months and months.

Just as she dominated the whole town, so had she dominated their lives, taking toll of their skill and strength week by week, and giving in return rent and groceries and tobacco and money for the pictures and the football matches. And she had given them an increasing self-respect, a further proof that there on the Clyde they could do a great job in the grand manner.

Then as we waited the sky, which had been heavy and grey for the last hour or two—"engineer's weather", somebody called it—thickened and curdled. It began to rain, and rain hard. It rained and rained, real dour Scotch stuff.

In ten minutes I lost all my enthusiasm. Within another ten minutes I had lost all hope. I was simply a wet, disagreeable man, vainly trying to dodge the spouting of neighbouring umbrellas, who heartily wished he was somewhere a long way off.

Nothing seemed to happen but rain and more rain. It says something for the ceremony which followed that it could lift me out of such a mood. And it did lift me out of it. I clean forgot that it was raining and that my hat and coat were ruined and that I was wet to the skin, miles from anywhere.

Cheering became nearer and nearer and louder and louder. Then Royalty, all in blue, could be seen through the streaming windows of the enclosure.

An address of welcome by Sir Percy Bates could be heard above the noisy downpour.

Then a speech from the King, not caught in its entirety,

though I heard enough to realize that there were some

good apt phrases in it.

And now it was Her Majesty's turn. Dodging this way and that and receiving further streams of water down my neck—I could see her approaching a special microphone.

The rain relented and allowed us to hear her saying clearly that this ship would be called the "Queen Mary." And now inside that glass enclosure mysterious and

wonder-working electric buttons were being pushed.

Above her ears a cord snapped, and a decorated bottle, apparently aware of the dignity of the occasion, quite deliberately swung itself against the great steel wall, smashing itself truly and well (thus averting all bad luck) and spouted wine into the water.

The launching had begun.

The great ship groaned. It was like a whole town in travail. Great timbers were smashed like matchwood. It moved. Yes, it actually moved. One waited in suffocated excitement. It moved more slowly at first, but soon it gathered speed. The massive coils of chains were suddenly galvanized into life and writhed like worms. They sent up clouds of rust like red-brown smoke. She had reached the water. She liked the water. She knew it was her own element. Oh!—she did it beautifully.

And so she was no longer something elaborately propped up on land, but a ship in the water, proud and free, the greatest and—I will swear—the most beautiful ship in the whole world, the most tremendous vessel ever

designed and created by man.

For two hours, standing on this platform, we stared at an enormous grey wall, but once she had slipped away we saw far below, beneath a copse of tall cranes, a crowd we had never dreamed of—10,000 faces.

Perhaps it was the emotion of the moment, but it

seemed then as if one were staring at a vision of humanity, planning and cussing, and sweating, hoping and fearing, and every now and then—as in this instance—suddenly achieving something grand, purposeful and beautiful.

There she was safely in the water with the tugs fussing round her. They were cheering all along both banks.

Somewhere a band was playing "Rule Britannia."

The King and Queen were walking along the high covered way and as they went hats were raised and voices lifted in their honour. Men who had grown grey in the shipyard were waiting there to be introduced to them. The crowd below was cheering itself hoarse.

The Queen Mary was moving in the water majestically. The enormous mould-loft had been transformed into a vast dining-room prettily hung with green and white curtains and flags, and there we assembled to drink tea and champagne, to toast this fine fellow and the other fine fellow, to listen to two excellent speeches.

It was all very well done, but nevertheless it was an anticlimax after the great emotional moment of the actual launching. A noble creature had been born into the world.

I am no friend to pageantry, but if there must be pageantry then this is the kind for me. The pageantry that celebrates not empty victories, not the idle pomp of power, but the work at once purposeful and beautiful of men's hands and brains.

This is the pageantry of the new age of communal industry. So what do a ruined top-hat and morning coat matter? After all, they belong to yesterday.

The Queen Mary is of tomorrow. We ought to be proud of her and of the men who made her.

THE DEATH TRAP

by "saki" (H. H. MUNRO)

CHARACTERS

DIMITRI, reigning prince of Kedaria.

DR. STRONETZ

COL. GIRNITZA
MAJOR VONTIEFF
CAPT. SHULTZ

officers of the Kranitzki Regiment of Guards.

SCENE: An ante-chamber in the Prince's Castle at Tzern.

TIME: The present day. The scene opens about ten o'clock in the evening.

An ante-chamber, rather sparsely furnished. Some rugs of Balkan manufacture on the walls. A narrow table in centre of room, another table set with wine bottles and goblets near window (right). Some high-backed chairs set here and there round room. Tiled stove (left). Door in centre.

GIRNITZA, VONTIEFF and SHULTZ are talking together as curtain rises.

GIRNITZA: The Prince suspects something: I can see it in his manner.

SHULTZ: Let him suspect. He'll know for certain in half an hour's time.

GIRNITZA: The moment the Andrieff Regiment has marched out of the town we are ready for him.

SHULTZ [drawing revolver from case and aiming it at an imaginary person]: And then—short shrift for his Royal Highness! I don't think many of my bullets will go astray.

GIRNITZA: The revolver was never a favourite weapon of mine. I shall finish the job with this.

[Half draws his sword and sends it back into its scabbard with a click.

VONTIEFF: Oh, we shall do for him right enough. It's a pity he's such a boy, though. I would rather we had a grown man to deal with.

GIRNITZA: We must take our chance when we can find it. Grown men marry and breed heirs and then one has to massacre a whole family. When we've killed this boy we've killed the last of the dynasty, and laid the way clear for Prince Karl. As long as there was one of this brood left our good Karl could never win the throne.

VONTIEFF: Oh, I know this is our great chance. Still, I wish the boy could be cleared out of our path by the finger of Heaven rather than by our hands.

SHULTZ: Hush! Here he comes.

[Enter, by door, centre, PRINCE DIMITRI, in undress cavalry uniform. He comes straight into room, begins taking cigarette out of a case, and looks coldly at the three officers.

DIMITRI: You needn't wait.

[They bow and withdraw, SHULTZ going last and staring insolently at the PRINCE. He seats himself at table, centre. As door shuts he stares for a moment at it, then suddenly bows his head on his arms in attitude of despair . . . A knock is heard at the door. DIMITRI leaps to his feet. Enter STRONETZ in civilian attire.

DIMITRI [eagerly]: Stronetz! My God, how glad I am to see you!

STRONETZ: One wouldn't have thought so, judging by the difficulty I had in gaining admission. I had to invent a special order to see you on a matter of health. And they made me give up my revolver; they said it was some new regulation.

DIMITRI [with a short laugh]: They have taken away every weapon I possess, under some pretext or another. My sword has gone to be reset, my revolver is being cleaned, my hunting-knife has been mislaid.

STRONETZ [horrified]: My God, Dimitri! You don't

mean----?

DIMITRI: Yes, I do. I am trapped. Since I came to the throne three years ago as a boy of fourteen I have been watched and guarded against this moment, but it has caught me unawares.

STRONETZ: But your guards!

DIMITRI: Did you notice the uniforms? The Kranitzki Regiment. They are heart and soul for Prince Karl; the artillery are equally disaffected. The Andrieff Regiment was the only doubtful factor in their plans, and it marches out to camp tonight. The Lonyadi Regiment comes in to relieve it an hour or so later.

STRONETZ: They are loyal, surely?

DIMITRI: Yes, but their loyalty will arrive an hour or so too late.

STRONETZ: Dimitri! You mustn't stay here to be killed!

You must get out quick!

DIMITRI: My dear good Stronetz, for more than a generation the Karl faction have been trying to stamp our line out of existence. I am the last of the lot; do you suppose that they are going to let me slip out of their claws now? They're not so damned silly.

STRONETZ: But this is awful! You sit there and talk

as if it were a move in a chess game.

DIMITRI [rising]: Oh, Stronetz! If you knew how I hate death! I am not a coward, but I do so want to live. Life is so horribly fascinating when one is young, and I've tasted so little of it yet. [Goes to window] Look out of the window at that fairyland of mountains with the forest running up and down all over it. You can just see Grodvitz where I shot all last autumn, up there on the left, and far away beyond it all is Vienna. Were you ever in Vienna, Stronetz? I've only been there once, and it seemed like a magic city to me. And there are other wonderful cities in the world that I've never seen. Oh, I do so want to live. Think of it; here I am alive and talking to you, as we've talked dozens of times in this grey old room, and tomorrow a fat, stupid servant will be washing up a red stain in that corner—I think it will probably be in that corner.

[He points to corner near stove (left).

STRONETZ: But you mustn't be butchered in cold blood like this, Dimitri. If they've left you nothing to fight with I can give you a drug from my case that will bring you a speedy death before they can touch you.

DIMITRI: Thanks, no, old chap. You had better leave before it begins; they won't touch you. But I won't drug myself. I've never seen anyone killed before, and I shan't

get another opportunity.

STRONETZ: Then I won't leave you; you can see two

men killed while you are about it.

[A band is heard in distance playing a march.

DIMITRI: The Andrieff Regiment marching out! Now they won't waste much time! [He draws himself up tense in corner by stove.] Hush, they are coming!

STRONETZ [rushing suddenly towards DIMITRI]: Quick! An

idea! Tear open your tunic!

[He unfastens DIMITRI'S tunic and appears to be testing his heart. The door swings open and the three officers enter. STRONETZ waves a hand commanding silence, and continues his testing. The officers stare at him.

GIRNITZA: Dr. Stronetz, will you have the goodness to leave the room? We have some business with His Royal

Highness. Urgent business, Dr. Stronetz.

STRONETZ [facing round] Gentlemen, I fear my business is more grave. I have the saddest of duties to perform. I

know you would all gladly lay down your lives for your Prince, but there are some perils which even your courage cannot avert.

GIRNITZA [puzzled]: What are you talking of, sir?

STRONETZ: The Prince sent for me to prescribe for some disquieting symptoms that have declared themselves. I have made my examination. My duty is a cruel one. . . . I cannot give him six days to live!

[DIMITRI sinks into chair near table in pretended collapse.

The officers turn to each other, nonplussed.

GIRNITZA: You are certain? It is a grave thing you are saying. You are not making any mistake?

STRONETZ [laying his hand on DIMITRI'S shoulder]: Would

to God I were!

[The officers again turn, whispering to each other. GIRNITZA: It seems our business can wait.

VONTIEFF [to DIMITRI]: Sire, this is the finger of Heaven. DIMITRI [brokenly]: Leave me.

[They salute and slowly withdraw. DIMITRI slowly raises his head, then springs to his feet, rushes to door and listens, then turns round jubilantly to STRONETZ.

DIMITRI: Spoofed them! Ye gods, that was an idea, Stronetz!

STRONETZ [who stands quietly looking at DIMITRI]: It was not altogether an inspiration, Dimitri. A look in your eyes suggested it. I had seen men who were stricken with a mortal disease look like that.

DIMITRI: Never mind what suggested it, you have saved me. The Lonyadi Regiment will be here at any moment and Girnitza's gang daren't risk anything then. You've fooled them. Stronetz, you've fooled them.

STRONETZ [sadly]: Boy, I haven't fooled them ...

DIMITRI [stared at him for a long moment]: It was a real examination I made while those brutes were waiting there to kill you. It was a real report I made; the malady is there.

DIMITRI [slowly]: Was it all true, what you told them? STRONETZ: It was all true. You have not six days to live. DIMITRI [bitterly]: Death has come twice for me in one evening. I'm afraid he must be in earnest. [Passionately.] Why didn't you let them kill me? That would have been better than this "to-be-left-till-called-for" business. [Paces across to window (right), and looks out. Turns suddenly.] Stronetz! You offered me a way of escape from a cruel death just now. Let me escape now from a crueller one. I am a monarch. I won't be kept waiting by death. Give me that little bottle.

[STRONETZ hesitates, then draws out a small case, extracts bottle and gives it to him.

STRONETZ: Four or five drops will do what you ask for.
DIMITRI: Thank you. And now, old friend, good-byc.
Go quickly. You've seen me just a little brave—I may
not keep it up. I want you to remember me as being brave.
Good-bye, best of friends, go.

[STRONETZ wrings his hand and rushes from the room with his face hidden in his arm. The door shuts. DIMITRI looks for a moment after his friend. Then he goes quickly over to side table and uncorks wine bottle. He is about to pour some wine into a goblet when he pauses as if struck by a new idea. He goes to door, throws it opens and listens, then calls, "Girnitza, Vontieff, Shultz!" Darting back to the table he pours the entire phial of poison into the wine bottle, and thrusts phial into his pocket. Enter the three officers.

DIMITRI [pouring the wine into four goblets]: The Prince is dead—long live the Prince! [He seats himself.] The old feud must be healed now, there is no one left of my family to keep it on, Prince Karl must succeed. Long life to Prince Karl! Gentlemen of the Kranitzki Guards, drink to your future sovereign.

[The three officers drink, after glancing at each other.

GIRNITZA: Sire, we shall never serve a more gallant Prince than your Royal Highness.

DIMITRI: That is true, because you will never serve another Prince. Observe, I drink fair! [Drains goblet.

GIRNITZA: What do you mean, never serve another Prince?

DIMITRI [rises]: I mean that I am going to march into the next world at the head of my Kranitzki Guards. You came in here tonight to kill me. [They all start.] You found that Death had forestalled you. I thought it a pity that the evening should be wasted, so I've killed you, that's all!

SHULTZ: The wine! He's poisoned us!

[VONTIEFF seizes the bottle and examines it. SHULTZ smells his empty goblet.

GIRNITZA: Ah! Poisoned!

[He draws his sword and makes a step towards DIMITRI, who is sitting on the edge of the centre table.

DIMITRI: Oh, certainly, if you wish it. I'm due to die of disease in a few days and of poison in a minute or two, but if you like to take a little extra trouble about my end, please yourself.

[GIRNITZA reels and drops sword on table and falls back into chair groaning. SHULTZ falls across table and VONTIEFF staggers against wall. At that moment a lively march is heard approaching. DIMITRI seizes the sword and waves it.

DIMITRI: Aha! the Lonyadi Regiment marching in! My good loyal Kranitzki Guards shall keep me company into the next world. God save the Prince! [Laughs wildly.] Colonel Girnitza, I never thought death . . . could be . . . so amusing.

[He falls dying to the ground.]

CURTAIN

a 29 p

IF I WERE YOU by DOUGLAS JAMES

CHARACTERS

GERRARD

INTRUDER

The scene is a small cottage interior. There is an entrance back right (which may be curtains). Another door to the left must be a practical door. The furniture is simple, consisting of a small table towards the left, a chair or two, and a divan rather up-stage on the right. (N.B .- "Right" and "left" are from point of view of audience.) On the table is a telephone.

When the curtain rises GERRARD is standing by the table 'phoning. He is a man of medium height, and wears horn-rimmed glasses. He is dressed in a lounge suit and

a great-coat. His voice is cultured.

GERRARD: ... Well, tell him to 'phone up directly, I must know. Yes, I expect I'll still be here, but you mustn't count on that . . . In about ten minutes' time. Right-ho. Good-bve.

[He puts down the 'phone and goes to the divan on the left, where there is a travelling bag, and starts packing. Whilst he is thus engaged, another man, similar in build to GERRARD, enters from the right silentlyrevolver in hand. He is flashily dressed in an overcoat and a soft hat. He bumps accidentally against the table, and at the sound GERRARD turns quickly.

GERRARD [pleasantly]: Why, this is a surprise, Mr .- er-185 7

INTRUDER: I'm glad you're pleased to see me. I don't think you'll be pleased for long. Put those paws up!

GERRARD: This is all very melodramatic; not very

original perhaps, but-

INTRUDER: Trying to be calm and-er-

GERRARD: "Nonchalant" is your word, I think.

INTRUDER: Thanks a lot. You'll soon stop being smart. I'll make you crawl. I want to know a few things, see.

GERRARD: Anything you like. I know all the answers. But before we begin I should like to change my position:

vou may be comfortable, but I am not.

INTRUDER: Sit down there, and no funny business. [Motions to chair, and seats himself on the divan by the bag.] Now then, we'll have a nice little talk about yourself!

GERRARD: At last a sympathetic audience! I'll tell you the story of my life. How as a child I was stolen by the gypsies, and why at the age of thirty-two I find myself in my lonely Essex cottage, how-

INTRUDER: Keep it to yourself, and just answer my

questions. You live here alone? Well, do you?

GERRARD: I'm so sorry. I thought you were telling me, not asking me. A question of inflexion; your voice isunfamiliar.

INTRUDER [with emphasis]: Do you live here alone? GERRARD: And if I don't answer?

INTRUDER: You've got enough sense not to want to get hurt.

GERRARD: I think good sense is shown more in the ability to avoid pain than in the mere desire to do so. What do you think, Mr.-er-

INTRUDER: Never mind my name. I like yours better.

Mr. Gerrard. What are your Christian names?

GERRARD: Vincent Charles.

INTRUDER: Do you run a car?

GERRARD: No.

INTRUDER: That's a lie. You're not dealing with a fool. I'm as smart as you and smarter, and I know you run a ear. Better be careful, wise guy!

GERRARD: Are you American, or is that merely a clever imitation?

INTRUDER: Listen, this gun's no toy. I can hurt you without killing you, and still get my answers.

GERRARD: Of course, if you put it like that I'll be glad to assist you. I do possess a car, and it's in the garage round the corner.

INTRUDER: That's better. Do people often come out here?

GERRARD: Very rarely. Surprisingly few people take the trouble to visit me. There's the baker and the greengrocer, of course; and then there's the milkman—quite charming, but no one so interesting as yourself.

INTRUDER: I happen to know that you never see tradespeople.

GERRARD: You seem to have taken a considerable amount of trouble. Since you know so much about me, won't you say something about yourself? You have been so modest.

INTRUDER: I could tell you plenty. You think you're smart, but I'm the top of the class round here. I've got brains and I use them. That's how I've got where I have.

GERRARD: And where precisely have you got? It didn't require a great brain to break into my little cottage.

INTRUDER: When you know why I've broken into your little cottage you'll be surprised, and it won't be a pleasant surprise.

GERRARD: With your figuring so largely in it, that is understandable. By the way, what particular line of crime do you embrace, or aren't you a specialist?

INTRUDER: My speciality's jewel robbery. Your car will do me a treat. It's certainly a dandy bus.

GERRARD: I'm afraid jewels are few and far between in the wilds of Essex.

INTRUDER: So are the cops. I can retire here nicely for a little while.

GERRARD: You mean to live with me? A trifle sudden, isn't it; you've not been invited.

INTRUDER: You won't be here long, so I didn't trouble to ask.

GERRARD: What do you mean?

INTRUDER: This is your big surprise. I'm going to kill you.

GERRARD: A little harsh, isn't it?

INTRUDER [with heavy sarcasm]: Yeah. I'll be sorry to do it. I've kinda taken a fancy to you, but it's just got to be done.

GERRARD: Why add murder to your other crimes? It's a grave step you're taking.

INTRUDER: I'm not taking it for fun. I've been hunted long enough. I'm wanted for murder already, and they can't hang me twice.

GERRARD: You're planning a gratuitous double, so to speak. Admitted you've nothing to lose, but what have you to gain?

INTRUDER: I've got freedom to gain. As myself I'm a poor hunted rat. As Vincent Charles Gerrard I'm free to go places and do things. I can eat well and sleep well without having to be ready to beat it at the sight of a cop.

GERRARD: In most melodramas the villain is foolish enough to delay his killing long enough to be frustrated.

You are much luckier.

INTRUDER: I'm O.K. I've got a reason for everything. I'm going to be Vincent Charles Gerrard, see. I've got to know what he talks like. Now I know. That posh stuff comes easy. This is Mr. V. C. Gerrard speaking. [Pantomime of 'phoning, in imitation cultured voice.] And that's not all. [He stands up.] Get up a minute. [GERRARD stands.] Now take a look at me.

GERRARD: You're not particularly decorative.

INTRUDER: No? Well, that goes for you, too. I've only got to wear specs. and I'll be enough like you to get away with it.

GERRARD: What about your clothes? They'll let you down if you're not careful.

INTRUDER: That'll be all right. Yours will fit me fine.

GERRARD: This is extremely interesting, but you seem to miss the point of my remark. I said you were luckier than most melodramatic villains. It was not a tribute to your intelligence. You won't kill me for a very good reason.

INTRUDER: So that's what you think.

GERRARD: You'll let me go, and thank God you didn't shoot sooner.

INTRUDER: Come on. What's on your mind? Better be quick. This conversation bores me.

GERRARD: Your idea is to elude the police by killing me and taking on my identity?

INTRUDER: Yes, I like the idea.

GERRARD: But are you sure it's going to help you?

INTRUDER: Now listen here. I've got this all planned. I did a job in town. Things went wrong and I plugged a cop. Since then I've done nothing but dodge.

GERRARD: And this is where dodging has brought you? INTRUDER: It brought me to Aylesbury. That's where I saw you—in the car. Two other people saw you and started to talk. I listened. It looks like you're a bit queer. Kind of mystery man.

GERRARD: A mystery which I propose to explain.

INTRUDER [disregarding him]: You 'phone your orders and sometimes you go away suddenly, and come back just the same. Those are just the things I want to do. Hearing about you was one of my luckiest breaks.

GERRARD: Apparently you haven't the intelligence to ask why I am invested in this cloak of mystery.

INTRUDER [preparing to shoot]: As I said before, this

conversation bores me.

GERRARD: Don't be a fool. If you shoot you'll hang for sure. If not as yourself, then as Vincent Charles Gerrard.

INTRUDER: What is this?

GERRARD: This is your big surprise. I said you wouldn't kill me and I was right. Why do you think I am here today and gone tomorrow, never see tradespeople? You say my habits would suit you. You are a crook. Do you think I am a Sunday-school teacher?

INTRUDER: You may be a liar.

GERRARD: Listen. The game's up as far as I'm concerned. Things went wrong with me. I said it with bullets and got away. Unfortunately they got one of my men and found things the fool should have burnt. Tonight I'm expecting trouble. My bag's packed ready to clear off. There it is.

INTRUDER: It's a bag all right, and this is a gun all right. What's all this?

GERRARD: That's a disguise outfit; false moustaches and what-not. Now do you believe me?

INTRUDER [musingly]: I don't know.

GERRARD: For God's sake clear that muddled head of yours and let's go. Come with me in the car; I can use you. If you find it's a fake you've got me in the car, and you've still got your gun.

INTRUDER: Maybe you're right.

GERRARD: Then don't waste time. [Goes and picks up hat and bag.

INTRUDER: Careful, boss, I'm watching you.

GERRARD: I've got a man posted on the main road. He'll ring up if he sees the police, but I don't want to leave it as

late as that. [Telephone bell rings.] Come on! They're after us. Through here straight to the garage.

INTRUDER: How do I know that?

GERRARD: Oh, don't be a fool. Look for yourself. [GERRARD opens door and steps away. INTRUDER leans forward to inspect it, with his side towards GERRARD but with revolver ready. As he turns his head, GERRARD gives him a push into the cupboard, knocking the revolver out of his hand. He slams the door and locks it, picks up the revolver and goes to the 'phone, where he stands with the gun pointed at the cupboard door. INTRUDER rattles door and shouts, "Let me out of here!"] Hallo. Yes, speaking. Sorry I can't let you have the props in time for rehearsal. I've had a spot of bother—quite amusing. I think I'll put it in my next play. Listen, can you tell our friend the Sergeant to come up here at once. You'll probably find him in the Public Bar....

GURTAIN

a 30 p

ON READING IN RELATION TO LITERATURE

VERY few persons know how to read. Considerable experience with literature is needed before taste and discrimination can possibly be acquired; and, without these, it is almost impossible to learn how to read. I say, almost impossible; since there are some rare men who, through a kind of inherited literary instinct are able to read very well even before reaching the age of twenty-five years. But these are great exceptions, and I am speaking of the average.

For, to read the characters or the letters of the text does not mean reading in the true sense. You will often find yourselves reading words or characters automatically, even pronouncing them quite correctly, while your minds are occupied with a totally different subject. This mere mechanism of reading becomes altogether automatic at an early period of life, and can be performed irrespective of attention. Neither can I call it reading to extract the narrative portion of a text from the rest simply for one's personal amusement, or, in other words, to read a book "for the story". Yet most of the reading that is done in the world is done in exactly this way. Thousands and thousands of books are bought every year, every month, I might even say every day, by people who do not read at all. They only think that they read. They buy books 'st to amuse themselves, "to kill time" as they call it; one hour or two their eyes have passed over all the pages, and there is left in their minds a vague idea or two about what they have been looking at; and this they really believe is reading. Nothing is more common than to be asked, "Have you read such a book?" or to hear somebody say, "I have read such and such a book." But these persons do not speak seriously. Out of a thousand persons who say, "I have read this", or "I have read that", there is not one, perhaps, who is able to express any opinion, worth hearing, about what he has been reading. Many and many a time I hear students say that they have read certain books; but if I ask them some questions regarding the book, I find that they are not able to make any answer, or at best they will only repeat something that somebody else has said about what they think that they have been reading. But this is not peculiar to students; it is in all countries the way that the great public devour books. I would say that the difference between the great critic and the common person is chiefly that the great eritic knows how to read, and that the common person docs not. No man is really able to read a book who is not able to express an original opinion regarding the contents of a book.

No doubt you will think that this statement of the ease confuscs reading with study. You might say, "When we read history or philosophy or science, then we do read very thoroughly, studying all the meanings and bearing of the text, slowly, and thinking about it. This is hard study. But when we read a story or a poem out of class-hours, we read for amusement. Amusement and study are two different things." I am not sure that you all think this; but young men generally do so think. As a matter of fact, every book worth reading ought to be read in precisely the same way that a scientific book is read—not simply for amusement; and every book worth reading should have the same amount of value in it that a

scientific book has, though the value may be of a totally different kind. For, after all, the good book of fiction or romance or poetry is a scientific work; it has been composed according to the best principles of more than one science, but especially according to the principles of the great science of life, the knowledge of human nature.

The first thing which a scholar should bear in mind is that a book ought not to be read for mere amusement. Half-educated persons read for amusement, and are not to be blamed for it; they are incapable of appreciating the deeper qualities that belong to a really great literature. But a young man who has passed through a course of university training should discipline himself at an early day never to read for mere amusement. And once the habit of the discipline has been formed, he will find it impossible to read for mere amusement. He will then impatiently throw down any book from which he cannot obtain intellectual food, any book which does not make an appeal to the higher emotions and to his intellect. But on the other hand, the habit of reading for amusement becomes with thousands of people exactly the same kind of habit as wine-drinking or opium-smoking; it is like a narcotic, something that helps to pass the time, something that keeps up a perpetual condition of dreaming, something that eventually results in destroying all capacity for thought, giving exercise only to the surface parts of the mind, and leaving the deeper springs of feeling and the higher faculties of perception unemployed.

This does not mean that there is any sort of good literature which should be shunned. A good novel is just as good reading as even the greatest philosopher can possibly wish for. The whole matter depends upon the way of reading, even more than upon the nature of what is read. Perhaps it is too much to say, as has often been said, that there is no book which has nothing in it; it is

better simply to state that the good of a book depends incomparably more for its influence upon the liabits of the reader than upon the art of the writer, no matter how great that writer may be.

Important as earcful reading is, you can readily perceive that it should not be wasted. The powers of a well-trained and highly educated mind ought not to be expended upon any common book. By common I mean cheap and useless literature. Nothing is so essential to self-training as the proper choice of books to read; and nothing is so universally neglected. It is not even right that a person of ability should waste his time in "finding out" what to read. He can easily obtain a very correct idea of the limits of the best in all departments of literature, and keep to that best.

The test of a great book is whether we want to read it only once or more than once. Any really great book we want to read the second time even more than we wanted to read it the first time; and every additional time that we read it we find new meanings and new beauties in it. A book that a person of education and good taste does not care to read more than once is very probably not worth much. But we cannot consider the judgment of a single individual infallible. The opinion that makes a book great must be the opinion of many. For even the greatest critics are apt to have certain dullnesses, certain inappreciations. Carlyle, for example, could not endure Browning; Byron could not endure some of the greatest of English poets. A man must be many-sided to utter a trustworthy estimate of many books. We may doubt the judgment of the single critic at times. But there is no doubt possible in regard to the judgment of generations. Even if we cannot at once perceive anything good in a book which has been admired and praised for hundreds of years, we may be sure that by trying, by studying it

carefully, we shall at last be able to feel the reason of this admiration and praise. The best of all libraries for a poor man would be a library entirely composed of such great works only, books which have passed the test of time.

This then would be the most important guide for us in the choice of reading. We should read only the books that we want to read more than once, nor should we buy any others, unless we have some special reason for so investing money. The second fact demanding attention is the general character of the value that lies hidden within all such great books. They never become old; their youth is immortal. A great book is not apt to be comprehended by a young person at the first reading, except in a superficial way. Only the surface, the narrative, is absorbed and enjoyed. No young man can possibly see at first reading the qualities of a great book. Remember that it has taken humanity in many cases hundreds of years to find out all that there is in such a book. But according to a man's experience of life, the text will unfold new meanings to him. The book that delighted us at eighteen, if it be a good book, will delight us much more at twenty-five, and it will prove like a new book to us at thirty years of age. At forty we shall re-read it, wondering why we never saw how beautiful it was before. At fifty or sixty years of age the same facts will repeat themselves. A great book grows exactly in proportion to the growth of the reader's mind.

What about the choice of books? Some years ago you will remember that an Englishman of science, Sir John Lubbock, wrote a list of what he called the best books in the world—or at least the best hundred books. Then some publishers published the hundred books in cheap form. Following the example of Sir John, other literary men made different lists of what they thought the best hundred books in existence; and now quite enough time has passed to show us the value of these experiments. They

have proved utterly worthless, except to the publishers. Many persons may buy the hundred books; but very few read them. And this is not because Sir John Lubbock's · idea was bad; it is because no one man can lay down a definite course of reading for the great mass of differently constituted minds. Sir John expressed only his opinion of what most appealed to him; another man of letters would have made a different list; probably no two men of letters would have made exactly the same one. The choice of great books must under all eircumstances be an individual one. In short, you must choose for yourselves according to the light that is in you. Very few persons are so many-sided as to feel inclined to give their best attention to many different kinds of literature. In the average of eases it is better for a man to confine himself to a small class of subjects—the subjects best according with his natural powers and inclinations, the subjects that please him. And no man ean decide for us, without knowing our personal character and disposition perfectly well and being in sympathy with it, where our powers lie. But one thing is easy to do—that is, to decide, first, what subject in literature has already given you pleasure, to decide, secondly, what is the best that has been written upon that subject, and then to study that best to the exclusion of ephemeral and trifling books which profess to deal with the same theme, but which have not yet obtained the approbation of great critics or of a great public opinion.

Those books which have obtained both are not so many in number as you might suppose. Each great civilization has produced only two or three of the first rank, if we except the single civilization of the Greeks. The sacred books embodying the teaching of all great religions necessarily take place in the first rank, even as literary productions; for they have been polished and repolished, and have been given the highest possible literary perfection

of which the language in which they are written is capable. The great epic poems which express the ideals of races, these also deserve a first place. Thirdly, the master-pieces of drama, as reflecting life, must be considered to belong to the highest literature. But how many books are thus represented? Not very many. The best, like diamonds, will never be found in great quantities.

LAFCADIO HEARN

THE MONKEY'S PAW

1

Without, the night was cold and wet, but in the small parlour of Laburnum Villa the blinds were drawn and the fire burned brightly. Father and son were at chess, the former, who possessed ideas about the game involving radical changes, putting his king into such sharp and unnecessary perils that it even provoked comment from the white-haired old lady knitting placidly by the fire.

"Hark at the wind," said Mr. White, who, having seen a fatal mistake after it was too late, was amiably

desirous of preventing his son from seeing it.

"I'm listening," said the latter, grimly surveying the board as he stretched out his hand. "Check."

"I should hardly think that he'd come tonight," said his father, with his hand poised over the board.

"Mate," replied the son.

"That's the worst of living so far out," bawled Mr. White, with sudden and unlooked-for violence; "of all the beastly, slushy, out-of-the-way places to live in, this is the worst. Pathway's a bog, and the road's a torrent. I don't know what people are thinking about. I suppose because only two houses in the road are let, they think it, doesn't matter."

"Never mind, dear," said his wife, soothingly; "perhaps you'll win the next one,"

Mr. White looked up sharply, just in time to intercept a knowing glance between mother and son. The words

died away on his lips, and he hid a guilty grin in his thin grey beard.

"There he is," said Herbert White, as the gate banged

to loudly and heavy footsteps came toward the door.

The old man rose with hospitable haste, and opening the door, was heard condoling with the new arrival. The new arrival also condoled with himself, so that Mrs. White said, "Tut, tut!" and coughed gently as her husband entered the room, followed by a tall, burly man, beady of eye and rubicund of visage.

"Sergeant-Major Morris," he said, introducing him.

The sergeant-major shook hands, and taking the proffered seat by the fire, watched contentedly while his host got out whisky and tumblers and stood a small copper kettle on the fire.

At the third glass his eyes got brighter, and he began to talk, the little family circle regarding with eager interest this visitor from distant parts, as he squared his broad shoulders in the chair and spoke of wild scenes and doughty deeds; of wars and plagues and strange peoples.

"Twenty-one years of it," said Mr. White, nodding at his wife and son. "When he went away he was a slip

of a youth in the warehouse. Now look at him."

"He don't look to have taken much harm," said Mrs. White, politely.

"I'd like to go to India myself," said the old man, "just to look round a bit, you know."

"Better where you are," said the sergeant-major, shaking his head. He put down the empty glass, and sigh-

ing softly, shook it again.

"I should like to see those old temples and fakirs and jugglers," said the old man. "What was that you started telling me the other day about a monkey's paw or something, Morris?"

"Nothing," said the soldier hastily. "Leastways nothing worth hearing.

"Monkey's paw?" said Mrs. White, curiously.

"Well, it's just a bit of what you might call magic, perhaps," said the sergeant-major, off-handedly.

His three listeners leaned forward eagerly. The visitor absent-mindedly put his empty glass to his lips and then set it down again. His host filled it for him.

"To look at," said the sergeant-major, fumbling in his pocket, "it's just an ordinary little paw, dried to a mummy,"

He took something out of his pocket and proffered it. Mrs. White drew back with a grimace, but her son, taking

it, examined it curiously.

"And what is there special about it?" inquired Mr. White as he took it from his son, and having examined

it, placed it upon the table.

"It had a spell put on it by an old fakir," said the sergeant-major, "a very holy man. He wanted to show that fate ruled people's lives, and that those who interfered with it did so to their sorrow. He put a spell on it so that three separate men could each have three wishes from it."

His manner was so impressive that his hearers were

conscious that their light laughter jarred somewhat.

"Well, why don't you have three, sir?" said Herbert

White cleverly.

The soldier regarded him in the way that middle age is wont to regard presumptuous youth, "I have," he said, quietly and his blotchy face whitened.

"And did you really have the three wishes granted?"

asked Mrs. White.

"I did," said the sergeant-major, and his glass tapped

against his strong teeth.

"And has anybody else wished?" persisted the old lady. "The first man had his three wishes. Yes," was the reply; "I don't know what the first two were, but the third was for death. That's how I got the paw."

His tones were so grave that a hush fell upon the group. "If you've had your three wishes, it's no good to you

now, then, Morris," said the old man at last. "What do you keep it for?"

The soldier shook his head. "Fancy, I suppose," he said slowly. "I did have some idea of selling it, but I don't think I will. It has caused enough mischief already. Besides, people won't buy. They think it's a fairy tale, some of them; and those who do think anything of it want to try it first and pay me afterward."

"If you could have another three wishes," said the

old man, eyeing him keenly, "would you have them?"
"I don't know," said the other. "I don't know."
He took the paw, and dangling it between his forefinger and thumb, suddenly threw it upon the fire. White, with a slight cry, stooped down and snatched it off.

"Better let it burn," said the soldier, solemnly.

"If you don't want it, Morris," said the other, "give it to me."

"I won't," said his friend, doggedly. "I threw it on the fire. If you keep it, don't blame me for what happens. Pitch it on the fire again like a sensible man."

The other shook his head and examined his new posses-

sion closely. "How do you do it?" he inquired.

"Hold it up in your right hand and wish aloud," said the sergeant-major, "but I warn you of the consequences."

"Sounds like the Arabian Nights," said Mrs. White, as she rose and began to set the supper. "Don't you think you might wish for four pairs of hands for me?"

Her husband drew the talisman from his pocket, and then all three burst into laughter as the sergeant-major, with a look of alarm on his face, caught him by the arm. "If you must wish," he said, gruffly, "wish for something sensible."

Mr. White dropped it back in his pocket, and placing chairs, motioned his friend to the table. In the business of supper, the talisman was partly forgotten, and afterward the three sat listening in an enthralled fashion to a second instalment of the soldier's adventures in India.

"If the tale about the monkey's paw is not more truthful than those he has been telling us," said Herbert, as the door closed behind their guest, just in time for him to catch the last train, "we shan't make much out of it."

"Did you give him anything for it, father?" inquired

Mrs. White, regarding her husband closely.

"A trifle," said he, colouring slightly. "He didn't want it, but I made him take it. And he pressed me again to throw it away."

"Likely," said Herbert, with pretended horror. "Why, we're going to be rich, and famous and happy. Wish to be an emperor, father, to begin with; then you can't be henpecked."

He darted round the table, pursued by the maligned Mrs. White armed with an antimacassar.

Mr. White took the paw from his pocket and eyed it dubiously. "I don't know what to wish for, and that's a fact," he said slowly. "It seems to me I've got all I want."

"If you only cleared the house, you'd be quite happy, wouldn't you?" said Herbert with his hand on his shoulder. "Well, wish for two hundred pounds, then; that'll just do it."

His father, smiling shamefacedly at his own credulity, held up the talisman, as his son, with a solemn face, somewhat marred by a wink at his mother, sat down at the piano and struck a few impressive chords.

"I wish for two hundred pounds," said the old man

distinctly.

A fine crash from the piano greeted the words, interrupted by a shuddering cry from the old man. His wife and son ran toward him.

"It moved," he cried, with a glance of disgust at the object as it lay on the floor. "As I wished, it twisted in my hand like a snake."

"Well, I don't see the money," said his son, as he picked it up and placed it on the table, "and I bet I never shall." "It must have been your fancy, father," said his wife,

regarding him anxiously.

He shook his head. "Never mind, though; there's no

harm done, but it gave me a shock all the same."

They sat down by the fire again while the two men finished their pipes. Outside, the wind was higher than ever, and the old man started nervously at the sound of a door banging upstairs. A silence unusual and depressing settled upon all three, which lasted until the old couple rose to retire for the night.

"I expect you'll find the cash tied up in a big bag in the middle of your bed," said Herbert, as he bade them goodnight, "and something horrible squatting up on top of the wardrobe watching you as you pocket your ill-gotten

gains."

He sat alone in the darkness, gazing at the dying fire, and seeing faces in it. The last face was so horrible and so simian that he gazed at it in amazement. It got so vivid that, with a little uneasy laugh, he felt on the table for a glass containing a little water to throw over it. His hand grasped the monkey's paw, and with a little shiver he wiped his hand on his coat and went up to bed.

11

In the brightness of the wintry sun next morning as it streamed over the breakfast table he laughed at his fears. There was an air of prosaic wholesomeness about the room which it had lacked on the previous night, and the dirty shrivelled little paw was pitched on the sideboard with a carelessness which betokened no great belief in its virtues.

"I suppose all old soldiers are the same," said Mrs. White. "The idea of our listening to such nonsense! How could wishes be granted in these days? And if they could, how could two hundred pounds hurt you, father?"

"Might drop on his head from the sky," said the frivo-

lous Herbert.

"Morris said the things happened so naturally," said his father, "that you might if you so wished attribute it to coincidence."

"Well, don't break into the money before I come back," said Herbert as he rose from the table. "I'm afraid it'll turn you into a mean, avaricious man, and we shall have to disown you."

His mother laughed, and following him to the door, watched him down the road; and returning to the breakfast table, was very happy at the expense of her husband's credulity. All of which did not prevent her from scurrying to the door at the postman's knock, nor prevent her from referring somewhat shortly to retired sergeant-majors of bibulous habits when she found that the post brought a tailor's bill.

"Herbert will have some more of his funny remarks, I expect, when he comes home," she said, as they sat at dinner.

"I dare say," said Mr. White, pouring himself out some beer; "but for all that, the thing moved in my hand; that I'll swear to."

"You thought it did," said the old lady, soothingly.

"I say it did," replied the other. "There was no thought about it; I had just—What's the matter?"

His wife made no reply. She was watching the mysterious movements of a man outside, who, peering in an undecided fashion at the house, appeared to be trying to make up his mind to enter. In mental connection with the two hundred pounds, she noticed that the stranger was well dressed, and wore a silk hat of glossy newness. Three times he paused at the gate, and then walked on again. The fourth time he stood with his hand upon it, and then with sudden resolution flung it open and walked up the path. Mrs. White at the same moment placed her hands behind her, and hurriedly unfastening the strings of her apron, put that useful article of apparel beneath the cushion of her chair.

She brought the stranger, who seemed ill at ease, into the room. He gazed at her furtively, and listened in a preoccupied fashion as the old lady apologized for the appearance of the room, and her husband's coat, a garment which he usually reserved for the garden. She then waited as patiently as her sex would permit, for him to broach his business, but he was at first strangely silent.

"I—was asked to call," he said at last, and stooped and picked a piece of cotton from his trousers. "I come from 'Maw and Meggins.'"

The old lady started. "Is anything the matter?" she asked, breathlessly. "Has anything happened to Herbert? What is it?"

Her husband interposed. "There, there, mother," he said, hastily. "Sit down, and don't jump to conclusions. You've not brought bad news, I'm sure, sir"; and he eyed the other wistfully.

"I'm sorry—" began the visitor.

"Is he hurt?" demanded the mother, wildly.

The visitor bowed in assent. "Badly hurt," he said quietly, "but he is not in any pain."

"Oh, thank God!" said the old woman, clasping her hands. "Thank God for that! Thank-"

She broke off suddenly as the sinister meaning of the assurance dawned upon her and she saw the awful confirmation of her fears in the other's averted face. She eaught her breath, and turning to her slower-witted husband, laid her trembling old hand upon his. There was a long silence.

"He was caught in the machinery," said the visitor

at length in a low voice.

"Caught in the machinery," repeated Mr. White, in a dazed fashion, "yes."

He sat staring blankly out at the window, and taking his wife's hand between his own, pressed it as he had been wont to do in their old courting-days nearly forty years before.

"He was the only one left to us," he said, turning gently to the visitor. "It is hard."

The other coughed, and rising, walked slowly to the window. "The firm wished me to convey their sincere sympathy with you in your great loss," he said, without looking round. "I beg that you will understand I am only their servant and merely obeying orders."

There was no reply; the old woman's face was white, her eyes staring, and her breath inaudible; on the husband's face was a look such as his friend the sergeant might have earried into his first action.

"I was to say that Maw and Meggins disclaim all responsibility" continued the other. "They admit no liability at all, but in consideration of your son's services, they wish to present you with a certain sum as compensation."

Mr. White dropped his wife's hand, and rising to his feet, gazed with a look of horror at his visitor. His dry

lips shaped the words, "How much?"

"Two hundred pounds," was the answer.

Unconscious of his wife's shriek, the old man smiled faintly, put out his hands like a sightless man and dropped, a senseless heap, to the floor.

111

In the huge new cemetery, some two miles distant, the old people buried their dead, and came back to a house steeped in shadow and silence. It was all over so quickly that at first they could hardly realize it, and remained in a state of expectation as though of something else to happen—something else which was to lighten this load, too heavy for old hearts to bear.

But the days passed, and expectation gave place to resignation—the hopeless resignation of the old, sometimes miscalled, apathy. Sometimes they hardly exchanged a word, for now they had nothing to talk about, and their

days were long to weariness.

It was about a week after, that the old man, waking suddenly in the night, stretched out his hand and found himself alone. The room was in darkness, and the sound of subdued weeping came from the window. He raised himself in bed and listened.

"Come back," he said, tenderly. "You will be cold."
"It is colder for my son," said the old woman, and wept

afresh.

The sound of her sobs died away on his ears. The bed was warm, and his eyes heavy with sleep. He dozed fitfully, and then slept until a sudden wild cry from his wife awoke him with a start.

"The paw!" she cried wildly. "The monkey's paw!"
He started up in alarm. "Where? Where is it? What's the matter?"

She came stumbling across the room toward him.

"I want it," she said, quietly. "You've not destroyed it?"

"It's in the parlour, on the bracket," he replied, marvelling. "Why?"

She cried and laughed together, and bending over,

kissed his cheek.

"I only just thought of it," she said, hysterically. "Why didn't I think of it before? Why didn't you think of it?"

"Think of what?" he questioned.

"The other two wishes," she replied, rapidly. "We've only had one."

"Was not that enough?" he demanded, fiereely.

"No," she eried, triumphantly; "we'll have one more. Go down and get it quickly, and wish our boy alive again."

The man sat up in bed and flung the bedelothes from his quaking limbs. "Good God, you are mad!" he eried,

aghast.

"Get it," she panted; "get it quickly, and wish-Oh,

my boy, my boy!"

Her husband struck a match and lit the candle. "Get back to bed," he said, unsteadily. "You don't know what you are saying."

"We had the first wish granted," said the old woman,

feverishly; "why not the second?"

"A coincidence," stammered the old man.

"Go and get it and wish," cried his wife, quivering

with excitement.

The old man turned and regarded her, and his voice shook. "He has been dead ten days, and besides he—I would not tell you else, but—I could only recognize him by his clothing. If he was too terrible for you to see then, how now?"

"Bring him back," cried the old woman, and dragged

him toward the door, "Do you think I fear the child I have nursed?"

He went down in the darkness, and felt his way to the parlour, and then to the mantelpiece. The talisman was in its place, and a horrible fear that the unspoken wish might bring his mutulated son before him ere he could escape from the room seized upon him, and he caught his breath as he found that he had lost the direction of the door. His brow cold with sweat, he felt his way round the table, and groped along the wall until he found himself in the small passage with the unwholesome thing in his hand.

Even his wife's face seemed changed as he entered the room. It was white and expectant, and to his fears, seemed to have an unnatural look upon it. He was afraid of her.

"Wish!" she cried, in a strong voice.

"It is foolish and wicked," he faltered.

"Wish!" repeated his wife.

He raised his hand. "I wish my son alive again."

The talisman fell to the floor, and he regarded it fearfully. Then he sank trembling into a chair as the old woman, with burning eyes, walked to the window and raised the blind.

He sat until he was chilled with the cold, glancing occasionally at the figure of the old woman peering through the window. The candle-end, which had burned below the rim of the china candlestick, was throwing pulsating shadows on the ceiling and walls, until, with a flicker larger than the rest, it expired. The old man, with an unspeakable sense of relief at the failure of the talisman, crept back to his bed, and a minute or two afterward the old woman came silently and apathetically beside him.

Neither spoke, but lay silently listening to the ticking

of the clock. A stair creaked, and a squeaky mouse scurried noisily through the wall. The darkness was oppressive, and after lying for some time screwing up his courage, he took the box of matches, and striking one, went downstairs for a candle.

At the foot of the stairs the match went out, and he paused to strike another; and at the same moment a knock, so quiet and stealthy as to be scarcely audible, sounded on the front door.

The matches fell from his hand and spilled in the passage. He stood motionless, his breath suspended until the knock was repeated. Then he turned and fled swiftly back to his room, and closed the door behind him. A third knock sounded through the house.

"What's that?" cried the old woman, starting up.

"A rat," said the old man in shaking tones—"a rat. It passed me on the stairs."

His wife sat up in bed listening. A loud knock resounded

through the house.

"It's Herbert!" she screamed. "It's Herbert!"

She ran to the door, but her husband was before her, and catching her by the arm, held her tightly.

"What are you going to do?" he whispered hoarsely.
"It's my boy; it's Herbert!" she cried, struggling mechanically. "I forgot it was two miles away. What are you holding me for? Let go. I must open the door."

"For God's sake don't let it in," cried the old man,

trembling.

"You're afraid of your own son," she cried, struggling.

"Let me go. I'm coming, Herbert; I'm coming."

There was another knock, and another. The old woman with a sudden wrench broke free and ran from the room. Her husband followed to the landing, and called after her appealingly as she hurried downstairs. He heard the chain rattle back and the bottom bolt drawn slowly

and stiffly from the socket. Then the old woman's voice, strained and panting.
"The bolt," she cried loudly. "Come down. I can't

reach it."

Her husband was on his hands and knees groping wildly on the floor in search of the paw. If he could only find it before the thing outside got in. A perfect fusillade of knocks reverberated through the house, and he heard the scraping of a chair as his wife put it down in the passage against the door. He heard the creaking of the bolt as it came slowly back, and at the same moment he found the monkey's paw, and frantically breathed his third and last wish.

The knocking ceased suddenly, although the echoes of it were still in the house. He heard the chair drawn back, and the door opened. A cold wind rushed up the staircase, and a long, loud wail of disappointment and misery from his wife gave him courage to run down to her side, and then to the gate beyond. The street lamp flickering opposite shone on a quiet and deserted road.

W. W. JACOBS

THE STOLEN BACILLUS

"This AGAIN," said the Bacteriologist, slipping a glass slide under the microscope, "is a preparation of the celebrated Bacillus of cholera—the cholera germ."

The pale-faced man peered down the microscope. He was evidently not accustomed to that kind of thing, and held a limp white hand over his disengaged eye. "I see very little," he said.

"Touch this screw," said the Bacteriologist; "perhaps the microscope is out of focus for you. Eyes vary so much.

Just the fraction of a turn this way or that."

"Ah! now I see," said the visitor. "Not so very much to see after all. Little streaks and shreds of pink. And yet those little particles, those mere atomies, might multiply and devastate a city! Wonderful!"

He stood up, and releasing the glass slip from the microscope, held it in his hand towards the window. "Scarcely visible," he said, scrutinizing the preparation. He hesitated. "Are these—alive? Are they dangerous now?"

"Those have been stained and killed," said the Bacteriologist. "I wish, for my own part, we could kill

and stain every one of them in the universe."

"I suppose," the pale man said with a slight smile, "that you scarcely care to have such things about you in

the living-in the active state?"

"On the contrary, we are obliged to," said the Bacteriologist. "Here, for instance—" He walked across the room and took up one of several sealed tubes. "Here is the living thing. This is a cultivation of the actual living

disease bacteria." He hesitated. "Bottled cholera, so to speak."

A slight gleam of satisfaction appeared momentarily in the face of the pale man. "It's a deadly thing to have in your possession," he said, devouring the little tube with his eyes. The Bacteriologist watched the morbid pleasure in his visitor's expression. This man, who had visited him that afternoon with a note of introduction from an old friend, interested him from the very contrast of their dispositions. The lank black hair and deep grey eyes, the haggard expression and nervous manner, the fitful yet keen interest of his visitor were a novel change from the phlegmatic deliberations of the ordinary scientific worker with whom the Bacteriologist chiefly associated. It was perhaps natural, with a hearer evidently so impressionable to the lethal nature of his topic, to take the most effective aspect of the matter.

He held the tube in his hand thoughtfully. "Yes, here is the pestilence imprisoned. Only break such a little tube as this into a supply of drinking water, say to these minute particles of life that one must needs stain and examine with the highest powers of the microscope even to see, and that one can neither smell nor taste—say to them, 'Go forth, increase and multiply, and replenish the cisterns,' and death—mysterious, untraceable death, death swift and terrible, death full of pain and indignity—would be released upon this city, and go hither and thither seeking his victims. Here he would take the husband from the wife, here the child from its mother, here the statesman from his duty, and here the toiler from his trouble. He would follow the water-mains, creeping along streets, picking out and punishing a house here and a house there where they did not boil their drinking-water, creeping into the wells of the mineral-water makers, getting washed into salad, and lying dormant in ices. He would

wait ready to be drunk in the horse-troughs, and by unwary children in the public fountains. He would soak into the soil, to reappear in springs and wells at a thousand unexpected places. Once start him at the water supply, and before we could ring him in, and catch him again, he would have decimated the metropolis."

He stopped abruptly. He had been told rhetoric was his

weakness.

"But he is quite safe here, you know-quite safe."

The pale-faced man nodded. His eyes shone. He cleared his throat. "These Anarchist—rascals," said he, "are fools, blind fools—to use bombs when this kind of thing is attainable. I think—"

A gentle rap, a mere light touch of the finger-nails, was heard at the door. The Bacteriologist opened it.

"Just a minute, dear," whispered his wife.

When he re-entered the laboratory his visitor was looking at his watch. "I had no idea I had wasted an hour of your time," he said. "Twelve minutes to four. I ought to have left here by half-past three. But your things were really too interesting. No, positively, I cannot stop a moment longer. I have an engagement at four."

He passed out of the room reiterating his thanks, and the Bacteriologist accompanied him to the door, and then returned thoughtfully along the passage to his laboratory. He was musing on the ethnology of his visitor. Certainly the man was not a Teutonic type nor a common Latin one. "A morbid product, anyhow, I am afraid," said the Bacteriologist to himself. "How he gloated on those cultivations of disease-germs!" A disturbing thought struck him. He turned to the bench by the vapour-bath, and then very quickly to his writing-table. Then he felt hastily in his pockets, and then rushed to the door. "I may have put it down on the hall table," he said.

"Minnie!" he shouted hoarsely in the hall.

"Yes, dear," came a remote voice.

"Had I anything in my hand when I spoke to you, dear, just now?"

Pausc.

"Nothing, dear, because I remember-"

"Blue ruin!" cried the Bacteriologist, and incontinently ran to the front door and down the steps of his house to the street.

Minnie, hearing the door slam violently, ran in alarm to the window. Down the street a slender man was getting into a cab. The Bacteriologist, hatless, and in his carpet slippers was running and gesticulating wildly towards this group. One slipper came off, but he did not wait for it. "He has gone mad!" said Minnie; "it's that horrid science of his"; and, opening the window, would have called after him. The slender man, suddenly glancing round, seemed struck with the same idea of mental disorder. He pointed hastily to the Bacteriologist, said something to the cabman, the apron of the cab slammed, the whip swished, the horse's feet clattered, and in a moment cab, and Bacteriologist hotly in pursuit, had receded up the vista of the roadway and disappeared round the corner.

Minnie remained straining out of the window for a minute. Then she drew her head back into the room again. She was dumbfounded. "Of course he is eccentric," she meditated. "But running about London—in the height of the season, too—in his socks!" A happy thought struck her. She hastily put her bonnet on, seized his shoes, went into the hall, took down his hat and light overcoat from the pegs, emerged upon the doorstep, and hailed a cab that opportunely crawled by.

The man in the foremost cab sat crouched in the corner, his arms tightly folded, and the little tube that contained such vast possibilities of destruction gripped in

his hand. His mood was a singular mixture of fear and exultation. Chiefly he was afraid of being caught before he could accomplish his purpose, but behind this was a vaguer but larger fcar of the awfulness of his crime. But his exultation far exceeded his fear. No Anarchist before him had ever approached this conception of his. Ravachol, Vaillant, all those distinguished persons whose fame he had envied, dwindled into insignificance beside him. He had only to make sure of the water supply, and break the little tube into a reservoir. How brilliantly he had planned it, forged the letter of introduction and got into the laboratory, and how brilliantly he had seized his opportunity! The world should hear of him at last. All those people who had sneered at him, neglected him, preferred other people to him, found his company undesirable, should consider him at last. Death, death, death! They had always treated him as a man of no importance. All the world had been in a conspiracy to keep him under. He could teach them yet what it is to isolate a man. What was this familiar street? Great Saint Andrew's Street, of course! How fared the chase? He craned out of the cab. The Bactcriologist was scarcely fifty yards behind. That was bad. He would be caught and stopped yet. He felt in his pocket for moncy, and found half a sovereign. This he thrust up through the trap in the top of the cab into the man's facc. "More," he shouted, "if only we get away."

The money was snatched out of his hand. "Right you are," said the cabman, and the trap slammed, and the lash lay along the glistening side of the horse. The cab swayed, and the Anarchist, half-standing under the trap, put the hand containing the little glass tube upon the apron to preserve his balance. He felt the brittle thing crack, and the broken half of it rang upon the floor of the cab. He fell back into the seat with a curse, and stared

dismally at the two or three drops of moisture on the apron.

He shuddered.

"Well! I suppose I shall be the first. Phew! Anyhow, I shall be a Martyr. That's something. But it is a filthy death, nevertheless. I wonder if it hurts as much as they sav."

Presently a thought occurred to him-he groped between his feet. A little drop was still in the broken end of the tube, and he drank that to make sure. It was better

to make sure. At any rate, he would not fail.

Then it dawned upon him that there was no further need to escape the Bacteriologist. In Wellington Street he told the cabman to stop, and got out. He slipped on the step, and his head felt queer. It was rapid stuff this cholera poison. He waved his cabman out of existence, so to speak, and stood on the pavement with his arms folded upon his breast awaiting the arrival of the Bacteriologist. There was something tragic in his pose. The sense of imminent death gave him a certain dignity. He greeted his pursuer with a defiant laugh.

"Vive l'Anarchie! You are too late, my friend. I have drunk it. The cholera is abroad!"

The Bacteriologist from his cab beamed curiously at him through his spectacles. "You have drunk it! An Anarchist! I see now." He was about to say something more, and then checked himself. A smile hung in the corner of his mouth. He opened the apron of his cab as if to descend, at which the Anarchist waved him a dramatic farewell and strode off towards Waterloo Bridge, carefully jostling his infected body against as many people as possible. The Bacteriologist was so preoccupied with the vision of him that he searcely manifested the slightest surprise at the appearance of Minnie upon the pavement with his hat and shoes and overcoat. "Very good of you to bring my things," he said, and remained lost in con-

templation of the receding figure of the Anarchist.
"You had better get in," he said, still staring. Minnie felt absolutely convinced now that he was mad, and directed the cabman home on her own responsibility. "Put on my shoes? Certainly, dear," said he, as the cab began to turn, and hid the strutting black figure, now small in the distance, from his eyes. Then suddenly something grotesque struck him and he laughed. Then he remarked, "It is really very serious, though.

"You see, that man came to my house to see me, and he is an Anarchist. No-don't faint, or I cannot possibly tell you the rest. And I wanted to astonish him, not knowing he was an Anarchist, and took up a cultivation of that new species of Bacterium I was telling you of, that infest, and I think cause, the blue patches upon various monkeys; and like a fool, I said it was Asiatic cholera. And he ran away with it to poison the water of London, and he certainly might have made things look blue for this civilized city. And now he has swallowed it. Of course, I cannot say what will happen, but you know it turned that kitten blue, and the three puppies—in patches, and the sparrow—bright blue. But the bother is, I shall have all the trouble and expense of preparing some more."

H. G. WELLS

THE USE OF SCIENTIFIC KNOWLEDGE

WE are often told that human misery and crime are the result of ignorance. But ignorance of what? If you mean ignorance of the material world outside us, ignorance of what science teaches regarding the laws and constitution of Nature, I cannot agree that our miseries and crimes come mainly from that. While some may arise from that source, far more and worse are the effect of misusing such knowledge as we already have. Much of the scientific knowledge we now possess is being used in a way which can only be described as blackguardedly. To employ our knowledge of chemistry, for example, that noble science, for the invention of poison gases to be let loose on women and children, is a misuse of knowledge which, if we were judged by that alone, would clearly stamp us as a race of blackguards. I can trace no correspondence between the increase of such knowledge and the decrease of misery and crime.

But if the ignorance we are talking about is not of the material world outside us but of the spiritual world within us, then I think we are much nearer the source both of misery and of crime, though not quite there even yet. The foolish or criminal use we make of our knowledge of the outer world of matter largely arises from our ignorance of the inner world of spirit—that is, of ourselves. At the same time we must not forget that moral and spiritual truth is sometimes misused in a very scandalous

miscarries, because their faces are turned in the wrong direction when the information is imparted.

What is the conclusion to be drawn from all this? For my part I draw it as follows. There is certainly a relation between morals and scientific progress, but not a fixed relation working at a steady rate in one direction only, either towards good or evil. We cannot say that men's characters improve in proportion as their knowledge increases, nor can we say the opposite. Good or evil to our characters the increase of knowledge certainly does. But which of the two it does predominantly depends on the people who get it—that is, on ourselves. If we are strong, balanced and self-controlled; if our faces are turned in the right direction and we have what Kant calls the good will, then the odds are that we shall put our knowledge to good use and improve our characters by doing so. But if we are weak, distracted and cowardly; if we are treacherous; if we are sneaks; if we are over-fond of ease and pleasure; if we have lost our nerve; if we are the kind of people who cannot be cheerful without a cocktail to make us so; if we are becoming biologically degenerate and our human quality is on the downgrade-then the odds are that we shall use the new knowledge to make a greater mess of our lives and become a greater nuisance to our fellow-men. There is nothing in any kind of knowledge, not even in spiritual knowledge, to make us absolutely sure that it will be put to a good use. We may know all that moral philosophy has to teach us, all that theology has to teach us and yet go to the devil all the same and perhaps all the quicker. The use that we make of it for good or evil is our own affair.

The question of human quality has been too much neglected in Western civilization. Our intellectual development in the field of science has outstripped our human development in the field of character. We have

bitten off intellectually more than we can chew morallyplease pardon the language. Science has built up for us an enormous stock of knowledge, but our power of putting it to the best use—another name for morality—is relatively undeveloped and behindhand. Our civilization, in consequence, is a lopsided affair, overweighted on the side of knowledge and machinery, underweighted on the side of character and self-control. The task of the future is to bring the two into better balance, not by taking weight from the knowledge scale but by adding weight to the character scale. There are five words of the poet Tennyson which well describe the lopsidedness of the modern world: "Knowledge comes but wisdom lingers." It is an ill-balanced condition some features of which are so outrageously foolish that one gets the impression at times of a world gone mad. Our Prime Minister, speaking a year ago on the race for armaments, said these words: "Nothing so impresses me with the incredible folly of our civilization." Strange result from centuries of scientific progress! Strange outcome from the universal diffusion of knowledge! How has it come about? A look into the past may help us to the answer.

Some three-and-a-half centuries ago there were living in England two incomparably great men. They were Francis Bacon and William Shakespeare, Bacon urging the mind of his age towards the investigation of the outer world by the experimental method, towards the positive sciences which give us control over Nature's forces; Shakespeare an explorer of the inner world, no less wonderful than the outer, the world of human life and character where the forces that rule our destinies have their birthplace and their home—Bacon pointing to knowledge, Shakespeare to wisdom. The two men represented two tendencies, both active in that age; the one a tendency towards mechanism, the other towards humanism.

Of those two great men I judge Shakespeare to have been the greater. But the Baconian tendency won the day. The major currents of Western civilization, of its thought, energy and ambition, turned in the mechanical direction and have followed it ever since in ever-increasing volume. The result is our mechanized civilization with its wealth, its power, its feats of engineering, its enormous productive capacity, its great cities and crowded populations, its social and international problems, its mechanical habit of thought and, over it all, the shadow of that incredible folly which so impresses Mr. Chamberlain. Knowledge came but wisdom lingered.

Had the current flowed in Shakespeare's direction instead of Bacon's, as it conceivably might—what then? We can only guess. Probably you and I would not be here to discuss the matter. Other men, and fewer of them, would have been in our place, men of a different quality, caring more for art and beauty and less for money and power; more originality, less imitation; more music and less noise; the countryside unspoilt by the jerry builder; neurasthenia less common in our great cities, but the sanitary arrangements not so good, and eight miles an hour still considered quick travelling. Probably no wireless and no motor-cars; and for the same reason no bombing acroplanes and no poison gas. Perhaps the Archbishop's Recall to Religion would not have been necessary. I leave you to strike the balance.

Perhaps it was all for the best. There are some who think—and I hope they are right—that our mechanical civilization is a prelude, an introductory chapter to something far better, a preparation of the tools that humanity will need hereafter for the most splendid creative age the world has ever seen, enriched by all the age of mechanism has achieved and using it creatively for human ends. The race between Bacon and Shakespeare—I mean of course

between the tendencies they represent—is not finished yet, by no means. Bacon had the better start and has been leading ever since. But I think the horse that Shakespeare rides, though far behind, has the greater staying power, and my belief is that he was marked for the winner before the foundation of the world. If I may end with a word of advice, I recommend you to put your money on that horse.

L. P. JACKS

NOTES

1

READING FOR PLEASURE

- L. A. G. Strong (b. 1896), an Irish novelist and journalist, has also written some stories for children.
- p. 1. to be in the swim: acquainted with the latest ideas
- p. 2. putting it in their way: drawing their attention to it.

 put off: prejudice against.

classical: which have become generally accepted as

first-class works of literature.

shoved up against a book: obliged to read a book.

get into the way of: become accustomed to.

stoppered down: stifled, as if enclosed in a bottle with a stopper on it.

p. 3. Mr. Thingumbob . . . Miss Whatshername: names used to describe just anybody.

"Vanity Fair": famous novel by W. M. Thackeray (1811-63).

"The Old Curiosity Shop": novel by Charles Dickens.
p. 4. "Eric, or Little by Little"; "St. Winifred's": children's books.

comic papers: magazines containing adventure stories and comic items.

fenny bloods: or "penny dreadfuls", were cheap magazines for boys containing bloodthirsty adventure stories or tales of horror.

thrillers: books and magazines containing stories of

crime, adventure and detection.

p. 5. "Under the Red Robe": historical adventure story set in the France of Cardinal Richelieu.

Claude Duval: a famous highwayman.

Sherlock Holmes: a famous detective character created by Sir Arthur Conan Doyle (1859-1930).

Sexton Blake: a famous detective of fiction who for many years has appeared in stories written for boys.

P. G. Wodelsouse (b. 1881): well-known humorist who began his career by writing stories of school life. Tom Merry, etc.: are school-boy characters from well-

known stories about a mythical public school.

Sir Herbert Tree (1853-1917): famous Shakespearean

actor.

Benson Company: well-known theatrical company under

Sir Frank Benson.
ram things down our throats: force us to read books

against our will.

sissy: a term of contempt for a boy who doesn't play

sissy: a term of contempt for a boy who doesn't play games or is effeminate in his ways.

P. 7. Dick Turpin and Jack Sheppard: notorious 18th-century highwaymen. Many stories for boys were written about them.

Jemima Puddleduck: an animal character in stories for young children.

make-up: character.

p. 6.

2

THE HAPPY PRINCE

Oscar Wilde, celebrated Irish writer, is as well remembered for his brilliant conversation as for his plays, stories and criticism. Among his plays are Lady Windermere's Fan, A Woman of No Importance, The Importance of Being Earnest; among his novels The Picture of Dorian Gray and Lord Arthur Savile's Crime.

- p. 10. leaves of fine gold: thin sheets of gold used to gild ornaments, etc.
 - charity children: orphans who live in an institution at public expense.
- p. 11. come to the point: immediately start talking about what one considers the essential question for discussion.
- p. 12. Sans-Souci: free from cares (French); the name of a palace built by Frederick the Great of Prussia at Potsdam.

p. 15. Second Cataract: one of the waterfalls of the River Nile at Wadi Halfa in the Sudan.

river-horse: hippopotamus.

the God Memnon: a handsome figure of antiquity killed by Achilles in the Trojan War. According to Greek mythology a statue was erected in his honour at Thebes.

p. 16. Temple of Baulbee: famous Roman Temple in the

ancient city of Baalbee in Syria.

p. 17. Mountains of the Moon: mythical region supposed by Ptolemy to have been the Source of the Nile.

3

THE SELFISH GIANT

p. 21. The Cornish ogre: legendary giant who lived in Cornwall in the south-west of England.

4

SHAKESPEARE

p. 28. Rosalind: heroine of As you Like It.
Portia: heroine of The Merchant of Venice.
Queen Elizabeth: of England (reigned 1558-1603)-

p. 29. parish: small ecclesiastical district served by the parish church, where records are kept of births, marriages

and deaths within the parish.

p. 30. pit: central part of the theatre in front of the stage.
gallants: rich and fashionable young men.
"quite the thing": respectable.
traterties: things needed in the production of a play

properties: things needed in the production of a play.

Marlowe (1564-93): English dramatist of great merit,
author of The Tragical History of Doctor Faustus,

Tamburlaine and Edward II.

5

DICKENS

P. 32. Chatham: naval station at the mouth of the River Thames.

Falstaff: famous comic character in Shakespeare's Henry IV, Part I, Henry IV, Part II and in The Merry Wives of Windsor.

P. 33. proceedings: i.e. in court cases.

P. 34. Westminster Abbey: famous old church in the centre of London where famous men are buried.

6

TACT

P. 35. pillow-rest: wooden frame used to support the backs of invalids.

nothing daunted: not discouraged.

7

THE SAD STORY OF A LOST MEMORY

P. 37. yard-arm: a cross piece on a mast for extending a sail. In the days of sailing ships sailors were sometimes punished by being made to walk the yard-arm. As it was short and narrow, they were usually unable to keep their balance and fell from it either on to the deck below or into the sea. (It is of course absurd to suppose that a passenger would be sitting on the yard-arm.)

p. 38. gunwale: (pronounced, and sometimes written, "gunnel"); upper edge of ship's side. (The writer uses the word humorously—one could scarcely strike a man with a gunwale, which is not a tool.)

deck-cricket: game played on board ship.

ash: walking-stick made of the wood of the ash-tree

cabin-steward: servant who looks after passengers' cabins on board ship.

8

FIGHTING THROUGH

A telephone consists of a "mouthpiece", into which you speak, and a "receiver", which you hold to your ear. On the old type of apparatus, the receiver hangs on a hook by the side of the mouthpiece. In order to "make a call", you lift the receiver from the hook and wait till an "operator" in the "Telephone Exchange" asks: "Number, please?" When you give the number, the operator "puts you through" to this number. When she has got through to the number, she may inform you, "You're through". You announce your presence on the end of the "line" with the word "Hello". When your conversation is finished you "ring off". Sometimes the operator accidentally disconnects you before you have finished your conversation; in such a case you move the receiver hook up and down, causing a light to flash on and off in the Exchange and attracting the operator's attention; you then tell her you have been "cut off".

p. 41. gerroff line: get off the line, i.e. put down your receiver and stop phoning me, so that I may make my call. bother the man: what a nuisance the man is.

the engine: the fire-engine, a lorry which carries firemen and fire-fighting equipment to the scene of a fire.

an engine off the line: Johnson thinks that he is talking about a railway engine which has fallen off the railway line.

brigade: a group of men who live in the fire-station and answer calls to put out fires.

looking up their number: i.e. in the telephone directory.

P. 42. p'leece: police (uneducated voice).

'ullow, 'ow: uneducated people often drop the "h" sound at the beginning of words,

P. 43. station: the policeman refers to the police-station, but Henry is talking about the fire-station. supervisor: person who supervises the operators at a

Telephone Exchange.

hold on: don't lose courage, keep fighting. P. 44.

THE MIRACLE OF RADIO

Hermes the messenger: ancient Greek God, one of whose duties was to earry messages.

directed into a beam: usually waves spread out in all directions like ripples in water, but Marconi discovered how to reflect them so that they were concentrated in a beam.

P. 46. the ether: ether is the imaginary medium in which waves are supposed to travel since men have found it difficult to explain wave motion in space.

Maxwell: 1831-79.

p. 47.

Hertz: 1857-94. Marconi: 1874-1937.

Morse telegraph key: apparatus used for sending telegraph messages; the key, when pressed, makes short or long buzzing sounds (dots and dashes).

Transmitter: apparatus used for sending out messages.

by telegraph.

Salisbury Plain: plain in the south of England where troop manœuvres are often carried out.

Osborne House: one of Queen Victoria's residences, in the Isle of Wight; no longer used as a royal residence.

Dublin Daily Express: Irish newspaper. p. 49.

Kingstown Regatta: yacht-sailing contests held at

Kingstown on the east coast of Ireland.

aircraft: aircraft are directed from the ground by wireless energy; information can be given to pilot by wireless, and his landing controlled in the same way.

Medicine: deep heat treatment by electromagnetic waves.

10

THE SIGN OF THE RED CROSS

p. 51. Sardinian and French Allies: in this war the King of Piedmont and Sardinia, supported by France, attacked the Austrians, who at that time ruled Lombardy.

Napoleon the Third: Emperor of the French 1852-70,

nephew of the great Napoleon.

Franz Joseph: Emperor of Austria 1848-1916.

p. 52. Slavs, Arabs: the Austrian Empire then included many peoples of Slav nationality; the Arabs were from the French possessions in North Africa.

p. 53. Tolstoy's "War and Peace": famous novel by the great Russian writer about Napoleons I's invasion of Russia.

General Dufour: famous Swiss general.

Abraham Lincoln: famous President of the United States 1860-65.

went over his head: appealed to a higher authority.

p. 54. on a white field: on a white background.

The International Committee: governing body of the

Red Cross with offices in Geneva.

Persecution mania: pathological state of mind in which the patient imagines that everyone wants to do him harm.

was quietly dropped: was no longer given a leading or important part in the organization; put aside.

p. 55. canvass: seek political support.

Nobel Peace Prize: awarded by the Swedish Academy to men who have distinguished themselves in the cause of world peace, from a fund left by Alfred Nobel (1833–96), famous Swedish scientist.

p. 56. internees: people who find themselves in an enemy

country in war-time and are confined to camps within that country by the authorities.

11

A STRANGE STORY

- O. Henry (real name William Sydney Porter, 1867–1910), an American, is one of the world's great short-story writers. His works include Cabbages and Kings, The Heart of the West and The Voice of the City.
- P. 57. Austin and San Antonio: towns in Texas, U.S.A. write-up: report for a newspaper.

 Street-car: tram (American).

12

FERDINAND DE LESSEPS

- P. 62. Officer of the Legion of Honour: Decoration instituted by Napoleon I and awarded to French soldiers and civilians for distinguished service to their country. Queen Isabella of Spain (1843-68).
 - Special envoy: official with special powers sent by one government to negotiate with another.
 - Manor House: house where the chief landowner of a district lives.
- P. 63. The Crimean War (1853-6): Britain and France supported Turkey against Russia.
- p. 64. Queen Victoria of England (1837-1901).

 Prince Consort: Prince Albert, husband of Queen
 Victoria.
- p. 65. Empress Eugenie: wife of Napoleon III, Emperor of the French 1852-70.
- p. 66. Order of the Star of India: order instituted by Queen Victoria.
 - the freedom of the city: granting of rights and privileges of citizenship to distinguished persons.
 - tidal wave: huge wave which often accompanies earth-quakes.

13

THE CONJURER'S REVENGE

Stephen Leacock, 1869-1914, Professor of Economics in McGill University, Canada, is one of the most humorous writers of this age. This story is taken from the book Literary Lapses.

Presto: magic word uttered by conjurers during the p. 68. performance of a trick.

quick: here used to mean elever, quick to understand.

a fifty-cent piece: coin worth half a dollar. p. 69.

Tipperary: small town in Ircland. The conjurer here is, of course, cracking a joke in calling the trick a Japanese one invented in Ircland.

silk-hat: tall shiny black hat worn on formal occasions. made a few passes: normally a conjurer makes "passes" (i.e. movements) with his hands to create an impression of mystery and magic, but in this case the writer humorously applies the words to the movements of the conjurer's fect.

celluloid collar: some years ago men's stiff white collars

were made of celluloid.

suspenders: article of men's clothing used to hold up p. 70. trouscrs: in Britain these are called "braces", and the word "suspenders" is the name for the article used to hold up socks.

14

DEER SHOOTING

Shetland Islands: a group of islands 140 miles to the p. 71. north-east of Scotland.

Jedburgh: town in southern Scotland.

"You'll be going down wind, etc.": As you'll be going in the same direction as the wind, you'll have to creep along so that the wind may not carry your scent to the animal.

Notes

Martini-Henry rifle: a well-known make of sporting rifle.

P. 73. Sabbath: Sunday, which is very strictly observed in Scotland.

15

A VISIT TO THE MOON

Sir James Jeans (1877-1946), famous British mathematician, has done much to popularize astronomy. This description of an imaginary visit to the moon is taken from his book Through Space and Time.

p. 74. scatter the sun's light: when the waves of light meet particles of dust and moisture floating in the atmosphere, they are separated one from the other, and in this way various colours are produced.

P. 75. cinema studio: large building in which film actors perform on a brilliantly-lit stage before the camera.

p. 76. cricket: popular British summer game. It is played on a large field in the middle of which is the "pitch" measuring 22 yards in length. From one end of the pitch a "bowler" hurls a ball which a batsman attempts to strike with a wooden stick called a "bat". A "batsman's game" is a game in which the batsman has many advantages—on the moon his weakest stroke would send the ball miles away. Great War: First World War 1914-1918.

P. 77. 212 degrees: boiling point of water on the Fahrenheit

thermometer.

16

THE MONSTER WASPS

H. G. Wells (1866-1946) is a famous English novelist,

sociologist and historian.

This extract is taken from The Food of the Gods, in which two scientists, Mr. Bensington and Professor Redwood, discovered a substance which would greatly increase the size of animals. They intended to experiment by feeding fowls on

it, but the people they put in charge of the experimental poultry farm were careless, and they allowed wasps to help themselves to the food. All the places mentioned are towns in Kent, a county in the south-cast of England.

p. 78. A keeper: a gamekeeper is employed to look after the game which is preserved on large estates to provide shooting for the owner's sport.

park: woods and grassland that form part of an estate.

let fly, right away: fired immediately.

p. 80. local showers: showers of rain that fall in limited areas

of the country.

British Museum: the largest museum in Britain, situated in London. It has a Reading Room where research workers may find any book they need for their studies.

p. 81. hansom: horse-drawn vehicle used as a taxi in the days

before motor-cars.

17

THE PURPLE JAR

Maria Edgeworth (1767-1849), a well-known writer, of Irish stock, is celebrated for her stories about children and for her stories based on national character. "Cautionary Tales", of which the *Purple Jar* is an example, were popular in the 19th century and were designed to demonstrate the dreadful consequences that children must suffer when they fail to heed the advice of their parents.

p. 83. blue, green, etc.: Rosamond sees the large jars filled with brightly coloured water which are used to

decorate chemists' shop windows in Britain. p. 85. closs: shoes with wooden soles, used by women in

wet weather in those days.

p. 86. with the flowers in her lap: Rosamond was holding up the front part of her long skirt to form a basket for her flowers.

Notes

p. 88. glass-houses: building, made of glass and heated by hot-water pipes, where tropical plants are grown: visits to such places were a popular diversion in the 19th century.

18

THE REFUGEE

Mrs. Pearl Buck (1892——), an American, is one of the greatest living women writers. Most of her stories are about China, whose language and people she knows thoroughly. Her novel The Good Earth was awarded the Nobel Prize for Literature in 1938. In China the flooding of the land by the great rivers sometimes causes great famines; in The Refugee Pearl Buck describes the plight of peasants who have been forced to leave their land and seek food in the city.

p. 89. side-walk: pavement (American). after a fashion: badly.
mats: tents made of plaited straw.

p. 90. rickshaw: two-wheeled carriage pulled by a man; it can carry two passengers.

feet were bound: it was formerly the fashion in China to bind women's feet tightly in cloth to keep them small.

p. 91. noodles: Chinese dish, resembling macaroni.

against to-morrow: to provide for me in the future.

19

FLYING

P. 96. King James IV of Scotland (1473-1513).

21

MEDICINE

p. 117. "the divine desease": Epilepsy.

the Museum of Alexandria: founded by Ptolemy Evergetis in the 3rd century A.D.

p. 119. Galen: (2nd century A.D.) after Hippocrates the most distinguished physician of antiquity.

22

ANDREW CARNEGIE

p. 128. "hungry forties": the forties of the last century were years of famine and distress which led to large-scale emigration from Europe to America.

Radical: member of a political movement which demanded reforms in the government of Britain.

Chartist: member of a political movement demanding the vote for the working classes.

boiler room: room in a factory where workmen stoke huge fires to produce steam power.

p. 129. operator: one who receives and sends messages in a Telegraph Office.

a complete breakdown: trains were brought to a standstill owing to the failure of the organization directing their movements.

white-haired: with very fair hair.

on the division: on that part of the railway.

p. 130. American Civil War: war between northern and southern states of the American Union (1861-65).

p. 131. The Wild West: the central and western areas of what is now the U.S.A. There was much lawlessness in these parts of the country in the early stages of their development.

Open up: develop.

"hot-house plant": delicate plant which can only grow in a glass-house and which requires special care and attention.

hardiest of growths: here means "strong and flourishing enterprise".

country squire: gentleman who is the chief landowner in a district.

laird: Scottish equivalent of a squire.

P. 133. coach and four: carriage drawn by four horses.

brass band: orchestra consisting of brass instruments only.

Gladstone (1809-98): famous Liberal statesman.

Morley (1838-1923): Liberal statesman and writer.

Spencer (1820-1903): famous philosopher.

p. 136. Rockefeller (1839-1937): famous American oil millionaire and philanthropist.

Nuffield (b. 1887): of Morris Motors; he has given huge sums to educational, medical and scientific institutions.

23

MARIE CURIE

p. 141. doctor's degree: highest degree awarded to students by Universities.

lumber-room: room where old and useless things are kept.

p. 142. Bohemia: western part of Czccho-Slovakia.

24

THE BISHOP'S CANDLESTICKS

Norman McKinnel achieved considerable success as an actor in the first quarter of this century. This short play is McKinnel's only achievement as a playwright. He died in 1930.

Applications regarding amateur performances of this play should be addressed to Messrs. Samuel French Ltd., 26

Southampton Street, Strand, London W.C.2.

p. 146. Candlestick: ornamental holder in which candle stands.

R. and L.: directions referring to positions on the stage,
viz: R. = right, L. = left, C. = centre, R.C. = in the
centre but somewhat towards the right side, up = at

the back of the stage, down = at the front of the stage nearest the audience.

winter wood scene without: outside the window is scenery

representing trees in winter.

discovered: i.e. they are on the stage when the curtain goes up.

p. 148. There's gratitude for you!: you are very ungrateful, i.e. you repay the Bishop's goodness to you by bringing trivial complaints to his notice, thus giving him more work to do.

p. 149. dot: dowry (French).

let yourself in: open the door and enter the house.

p. 152. I'm too old a bird to be caught with chaff: I am too experienced to be easily tricked.

p. 153. to be at the beck and call of: to be in a position where one has to obey orders without questioning. ne'er-do-well: good for nothing; rogue.

p. 154. faugh! steel: i.e. the convict is disgusted that the fork is not made of silver.

I'm damned: expression of surprise; but the Bishop in the next line gives it its literal meaning: "con-demned for ever in Hell."

p. 158. They'd start one fair: they would enable me to start life

my hearty: my friend.

chain-mates: fellow-convicts.

Here goes: I'll do it.

p. 163. Temple of the Living God: i.e. the spirit of God is always present in us, however low we may have sunk in the world.

prie-dieu: kneeling desk for use in prayer.

26

THE GLOVE

P. 164. drain: continued loss.

mire: mud (here means "difficulty").

p. 165. stodgy: dull and unimaginative in appearance and in personality.

p. 167. of yore: in the past,

p. 168. felt queer: felt sick and faint.

27

POST HASTE

p. 169. Post Haste: play on words; the story is about a letter which has to be posted urgently, and "post haste" is an old expression meaning "with great speed and urgency."

machine: outside post-offices there are machines which deliver stamps when you insert a coin; one machine supplies penny and the other half-penny stamps.

coppers: pennies and half-pennies.

drew blank: were unsuccessful; saw nobody.

run to earth: discover after a long search.

pocket-book: small note-book in which one writes addresses, engagements, etc.

p. 171. book of stamps: in Britain one can buy small books containing a number of stamps of various values.

double postage: if the sender fails to stamp the envelope, the recipient has to pay double the amount due.

p. 172. collection: the postman collects letters from the pillarboxes at fixed times three or four times a day.

stricken: paralysed or wounded.

jerked out: spoke abruptly as if he had difficulty in uttering the words.

popped: went quickly (slang).

27

THE LAUNCHING OF THE QUEEN MARY

J. B. Priestley (b. 1894) has earned popularity with his novels, plays and journalistic writing.

The Queen Mary, a famous liner of 81,235 tons, was launched in 1934. When a ship is ready for launching the props supporting her are knocked away by machines, and she slides down a greased wooden passage, called the slipway, into the river where she is brought to rest by chains and anchors. Tugs then tow her to the dock, where the machinery, funnels, masts, etc. are installed. In the case of a great ship, the launching is usually carried out by a member of the Royal Family, who names the ship as a bottle of wine is broken against her prow. The Queen Mary was built at Clydebank, one of Britain's chief ship-building areas, near Glasgow in Scotland.

- p. 173. morning-coat: black coat with tails worn on formal occasions.
- p. 174. nearest approach to the great cathedrals: Priestley suggests that modern man expresses his spiritual and creative impulses in the construction of mighty works in steel, just as men in the Middle Ages expressed the religious spirit of their times in the creation of beautiful cathedrals.
 - launching platform: place from which the ship is launched and where important visitors sit to watch the ceremony.
 - button-pressing: pressing of the electric switches that operate the machinery which forces the ship down the slipway.
 - other banks: opposite banks of the river Clyde. stands: raised row of seats.

stands: raised row of seats.

- p. 175. dour Scotch stuff: persistent rain.
 - Sir Percy Bates: chairman of the Cunard Company which owns the Queen Mary.
- p. 176. great timbers were smashed... when the ship began to move, the props, the large strong pieces of wood supporting her, were broken into small pieces of wood.
- p. 177. eussing: cursing (slang).
- "Rule Britannia": patriotic song praying for power on the sea.

Notes

243

mould-loft: room on floor of which plans of ship are drawn full size.

they belonged to yesterday: these formal clothes represent an aristocratic age that has passed.

28

THE DEATH TRAP

"Saki", whose real name is H. H. Munro, was born in Burma in 1870 and was killed in action in 1916.

p. 178. shrift: confession of sins to a priest. To give short shrift: to give little time for confession before killing a person, i.e. to kill without mercy and quickly.

p. 179. undress cavalry uniform: the uniform of an officer when he is off duty, i.e. without belt or arms.

p. 182. spoofed: tricked, deceived (slang).

p. 183. "to-be-left-till-called-for": words written on parcel or other article which is to remain in a place until someone comes to fetch it. The Prince means that he will have to wait until Death comes to claim him.

29

IF I WERE YOU

Characters: Gerrard is the typical English gentleman who in a desperate situation keeps his head and his sense of humour. He speaks "Standard English", whereas the Intruder speaks with an American accent and uses American slang words.

At entrance back right: the entrance is at the back and on the right side of the stage. It need not be a real door—it can be made with curtains. The "practical door" mentioned in the next line must really be able to open and shut.

P. 185. right-ho: all right.

flashily: in a showy but cheap manner.

paws: hands (slang).

I'll make you crawl: make you do what I want; make you answer my questions.

I know all the answers: I am so clever I can tell you everything you want to know (ironical).

no funny business: don't try to trick me or try to escape.

p. 186. I thought you were telling me: Gerrard ironically refers to the Intruder's question "You live here alone?" which the Intruder uttered with a downward inflexion of the voice, making the question sound like a statement. In saying that the Intruder's voice is "unfamiliar", Gerrard pretends that it is difficult for him to understand such an uneducated manner of speaking.

run a car: own and use a car.

wise guy: clever fellow (American slang).

p. 187. I'm the top of the class: I'm the best and cleverest.

with you figuring so largely: since an unpleasant fellow like you is playing such an important part in the surprise, I can quite believe that it will not be pleasant.

do me a treat: suit me very well.

few and far between: very rare.

Wilds of Essex: some of the county of Essex near London has not been urbanized and still retains much of its original rural character.

cops: policemen (slang).

p. 188. yeah: yes (American slang).

kinda: kind of (American slang); rather.

a gratuitous double!: two unnecessary murders which you hope will go unpunished.

beat it: run away.

posh stuff: here means high-class or educated manner of speaking.

p. 189. that goes for you too: and the same applies to you.

specs .: spectacles.

they'll let you down: they won't do what you hope, i.e. your flashy clothes will betray your real identity. plugged: shot (slang).

dodge: try to escape being caught.

breaks: strokes of good luck.

the game's up: my course of action has failed. said it with bullets: I shot someone.

p. 190. fake: false story.

boss: master, mister (slang).

p. 191. spot of bother: a little trouble.

sergeant: of the police.

Public Bar: room in an inn where people drink.

30

ON READING IN RELATION TO LITERATURE

Lascadio Hearn (1850-1904) was born in the Ionian Islands of Irish-Greek parents. He became a Prosessor of English Literature at Tokio University and married a Japanese. Hearn, in his works, made Japanese life familiar to Western readers. Hearn's views on reading should be compared with L. A. G. Strong's (see page 1). Both essays provide excellent subjects for debate, particularly Hearn's in view of the fact that a great English critic has said that his opinions on literature are utterly valueless.

What do you think?

p. 196. dullnesses: inability to respond to certain styles of literature.

inappreciations: inability to appreciate

Carlyle (1795-1881): famous Scots critic, essayist and historian.

Browning (1812-89): famous poet.

Byron (1788-1824): famous poet—he disliked the poetry of Wordsworth.

p. 197. Sir John Lubbock (1834-1913): later Lord Avcbury, banker, politician and scholar.

31

THE MONKEY'S PAW

W. W. Jacobs (1863-1943) is perhaps best known for his exceedingly humorous sailors' stories contained in such volumes as Many Cargoes and Night Watches.

p. 199. what people are thinking about: why the municipal authorities don't improve the state of the roads.

a knowing glance: a look of mutual understanding. condoling: Mr. White sympathized with his visitor because of the foul weather and the bad road: the visitor agreed with him, using bad language that

caused Mrs. White to express disapproval.
p. 202. "The Arabian Nights": famous tales of fantastic adventures told by the wife of an eastern prince.

p. 203. cleared the house: paid off the debt on the house.

p. 204. ill-gotten: dishonestly acquired.

p. 205. break into: begin spending.

p. 206. ill at ease: uncomfortable, embarrassed.

there, there: expression of reassurance, i.e. "Don't worry about it."

p. 207. courting days: the time when a young man and woman go out together with a view to becoming engaged. his first action: the first time he went into battle.

32

THE STOLEN BACILLUS

p. 213. glass slide: small thin piece of glass on which the bacteriologist places his specimen of bacteria; he then stains it with chemical dyes in order that the bacteria may show up under the microscope.

not accustomed to that kind of thing: the experienced

scientist keeps both eyes open while looking down

a microscope.

cultivation: number of bacteria produced by a scientist

for experimental purposes.

to take the most effective aspect: i.e. the bacteriologist felt encouraged to talk about the great destructive power of the bacteria in order to impress his visitor.

p. 214. one must needs: one is obliged.

ring him in: surround and capture him.

p. 215. Anarchist: member of a political party popularly supposed to desire the destruction of civilization.

Notes 247

p. 216. cab: horse-drawn vehicle used as a taxi in those days. in the height of the season: in the busiest part, socially, of the year in London, when rich and fashionable people are in residence.

p. 217. Vaillant (1840-1915): one of the founders of French

socialism.

p. 218. Vive l'Anarchie: long live Anarchy (French).

p. 219. look blue: be sad and depressed; but the scientist uses the expression in its literal as well as in its idiomatic sense.

33

THE USE OF SCIENTIFIC KNOWLEDGE

L. P. Jacks (b. 1860), philosopher and writer on religious subjects, was Professor of Philosophy at Manchester College, Oxford.

p. 222. Kant: German philosopher (1724-1804).

bitten off more than we can chew: we have undertaken to do something which is beyond our power to carry out.

p. 223. Our Prime Minister: Neville Chamberlain (Prime Minister of England, 1937-40).

Francis Bacon: famous English philosopher and states-

man (1561-1626).

p. 224. mechanism: idea that regards the universe, including man, as being composed of matter that behaves according to unchanging and unchangeable natural laws.

humanism: idea that gives to the human spirit the central place in the universal order and believes in its ability to dominate matter.

p. 225. had the better start: had the advantage at the beginning.
staying power: ability to show endurance.
marked for the winner: i.e. God had decided that spirit
and not matter should be victorious in the end.
put your money on that horse: support that idea.